

# East Bay Ladders and Walkways (Contract No. 04-025504)

The as-built drawings, which are contained in these CDs, are scanned from drawings of the existing structure for the convenience of the contractor and as a means to convey to the contractor the available information regarding the existing structure. It is to be understood that no claim is being made as to the accuracy or completeness of the said information and that the State of California or its officers or agents shall not be responsible for the manner in which the contractor interprets and uses this information or for the accuracy, currency or completeness of these scanned as-built drawings. The contractor shall be responsible to obtain, at the contractor's expense, any additional information that the contractor deems necessary for completely and accurately assessing the existing conditions of the structure. The contractor shall not be entitled to any compensation for any claim arising from inaccuracy or insufficiency of these as-built drawings or in anyway related to these drawings.

[1. Project Plan](#)

[2. Bridge Elevation](#)

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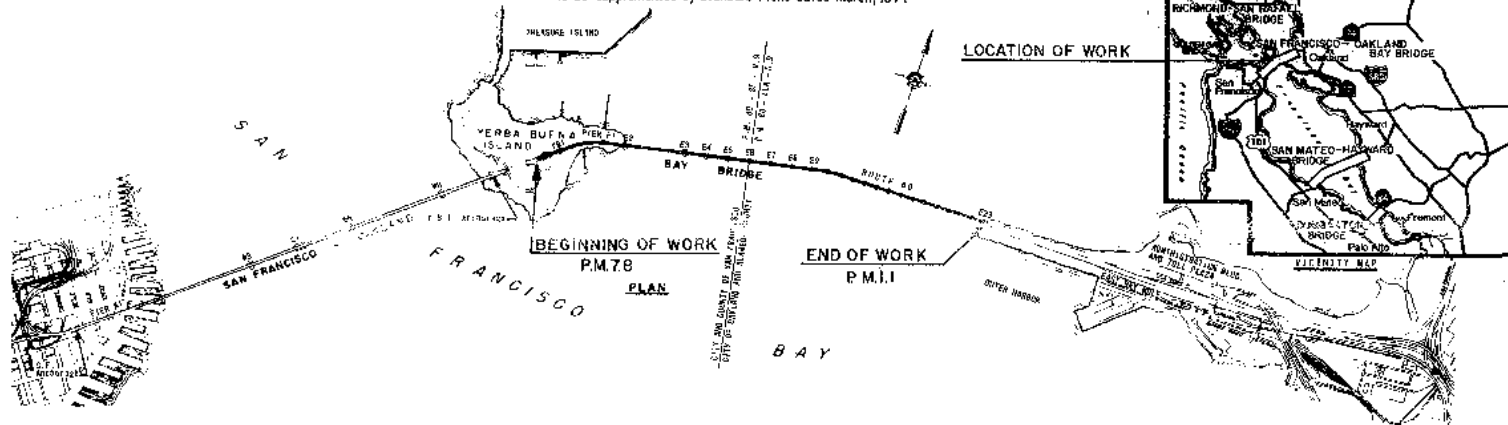
[25. Details at Navigation Lights – 2](#)

[26. Details at Navigation Lights – 3](#)

[27. Revision Details](#)

IN SAN FRANCISCO AND ADJACENT COUNTIES  
ON THE SAN FRANCISCO BAY AND BAY BRIDGE

To be supplemented by Standard Plans dated March, 1977



SHEET NUMBER	TITLE	SHEET NUMBER	TITLE
1.	Project Plan	16	Anchor Details - Cantilever Spans - 3
2.	Diaphragm Elevations	15	Flathead and Ladder Details - Cantilever Spans
3.	Member Details - Type A	17	Walkway Details - Cantilever Spans - 1
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6.	Walkable Ladder Details - 1	19	Walkway Details - Cantilever Spans - 4
7.	Walkable Ladder Details - 2	20	Walkway Details - Cantilever Spans - 5
8.	Walkable Ladder Details - 3	21	Platform, Ladder and Hoisting General
9.	Walkway and Piers Details - 1	22	Details of Hoist and Hoisting General
10	Walkway and Pier Detail - 2	23	Details of Suspended Span at $45^\circ$ and $22\frac{1}{2}^\circ$
11	Walkway and Pier Detail - 3	24	Details of Hydraulic System - 1
12	Walkway and Pier Detail - 4	25	Details of Hydraulic System - 2
13	Walkway and Pier Detail - 5	26	Details of Navigation Lights - 1
		27	Details of Navigation Lights - 2
		28	Navigation Lights

*[Signature]*  
CHIEF, BUREAU OF SERVICE DELIVERY  
REGISTRATION DIVISION, MINISTRY OF JUSTICE

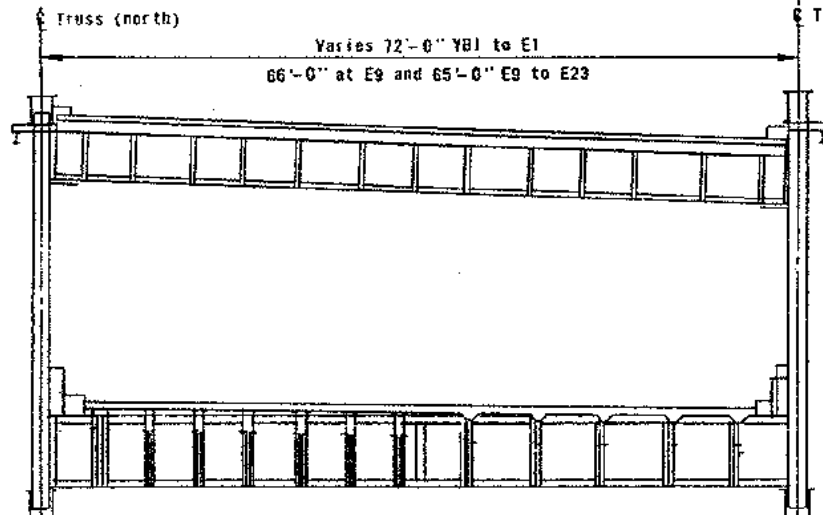
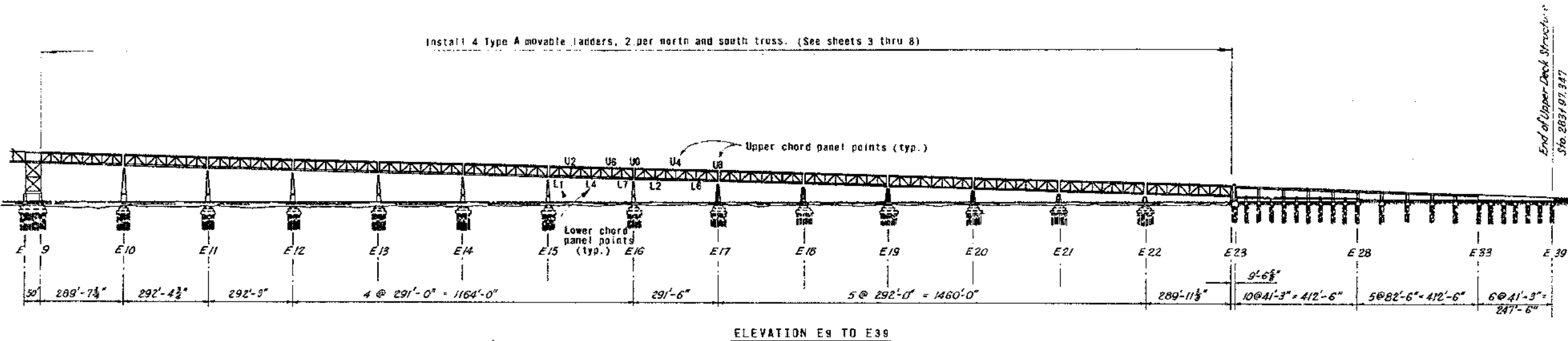
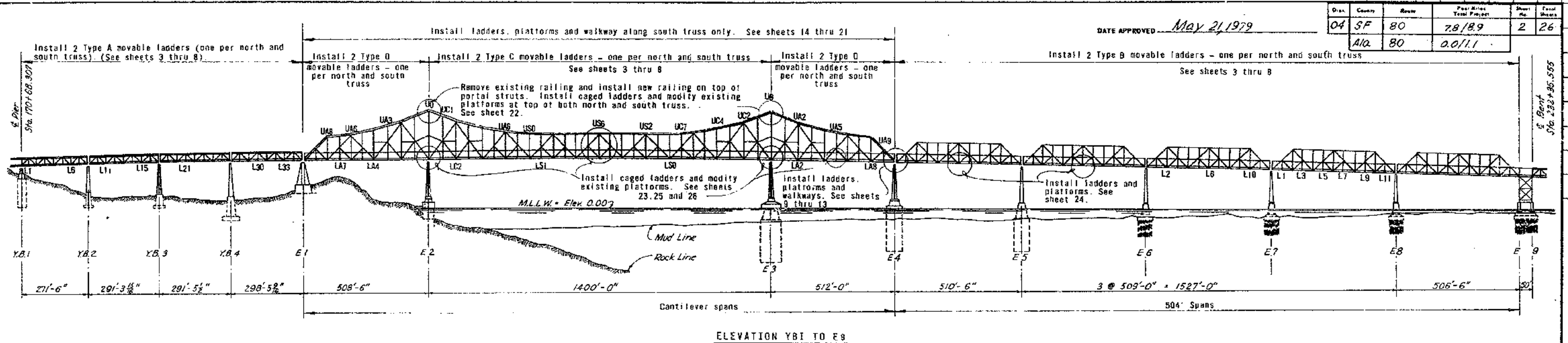
• Understood May 24, 1979

Continued on GA-12255CM  
Date Completed 5-11-83  
At Bldg. \_\_\_\_\_  
Resident Inspector S. Cooper  
Sanction No. 62194 Date 4-15-83

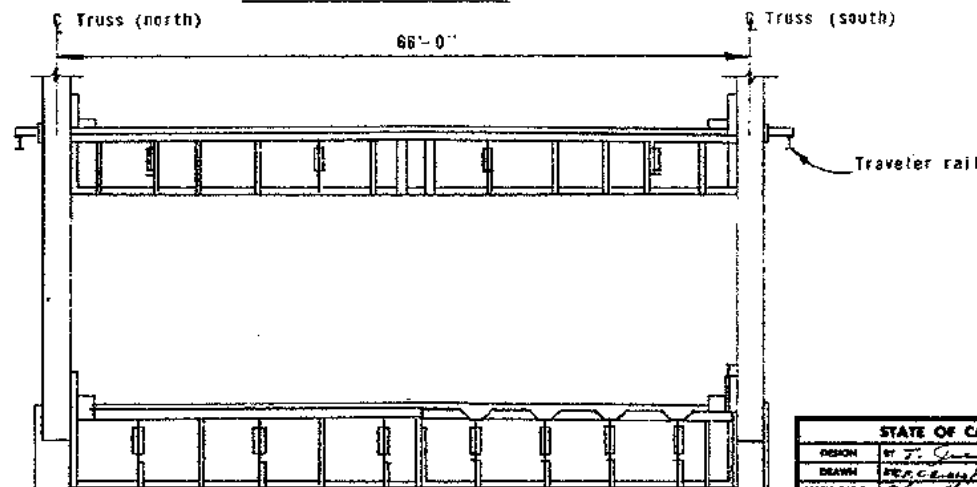
Contract No.	04-025504
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STATE OF CALIFORNIA - HIGHWAYS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION		PROJECT NO. 100-0000000000000000	
Project Name San Francisco - Oakland Bay Bridge	Project Location San Francisco - Oakland Bay Bridge	SAN FRANCISCO - OAKLAND BAY BRIDGE EAST BAY LADDERS AND RAILWAYS	
Project Number 100-0000000000000000	Project Date January 26, 1991	PROJECT PLAN	
Project Engineer John S. Smith	Project Designer John S. Smith	Scale 1" = 1700'	Sheet No. 00 00000-10

04 250-8250



TYPICAL SECTION  
Piers YB1 to E1 and E9 to E23  
No Scale



TYPICAL SECTION  
Pier E1 to E9  
No Scale

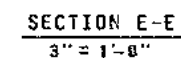
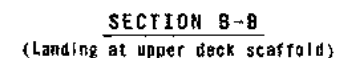
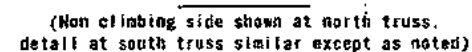
#### GENERAL NOTES

1. The Contractor shall verify, by field check, all necessary dimensions of the existing structural members prior to fabrication of the new material.
2. Dimensions of existing structural members as shown on all drawings are from original shop drawings. These drawings are available to the Contractor.
3. For removal details see sheet 21.
4. Where high strength bolts are required, they will be called out as H.S. bolts on the plans or will be noted as high strength bolts in the sheet notes.

Contract No.	04-025504
Date Accepted	2-11-81
As Built	
Resident Engineer	S. Cooper
Reviewed By	R. C. K. mab Date 6-15-81

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION		SAN FRANCISCO - OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS	
DESIGN BY T. J. J. CHECKED R. J. J. DRAWN P. J. J. SPECIFICATION P. J. J. IN CHARGE OF DESIGN	APPROVED January 29, 1979 S. Larson REGISTERED ENGINEER C15910	DESIGN ENGINEER H. E. E. G. C1279C	BRIDGE ELEVATION No Scale SHEET NO. 2 DRAWING NO. 04-025504-2 R

DATE APPROVED - May 21, 1979



1. For details of landings and folding platforms see sheet 8.
2. For details of upper support system see sheet 6.
3. For details of lower support system see sheet 7.
4. All dimensions shown are to the g of structural tubing unless noted.

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION

DESIGN	BY T. Jee	CHEK R.E. Kinn
DRAWN	BY R.E. Kinn	CHEK T. Jee
INFORMATION	1. Loading	ESTIMATE R. Chin
IN CHARGE OF DESIGN		

**OLY**  
Olympic  
APPROVED January 29, 1979

SAN FRANCISCO - OAKLAND BAY BRIDGE  
EAST BAY LADDERS AND WALKWAYS

MOVABLE LADDER - TYPE A

DESIGN ENGINEER - REG. ENG. C12732

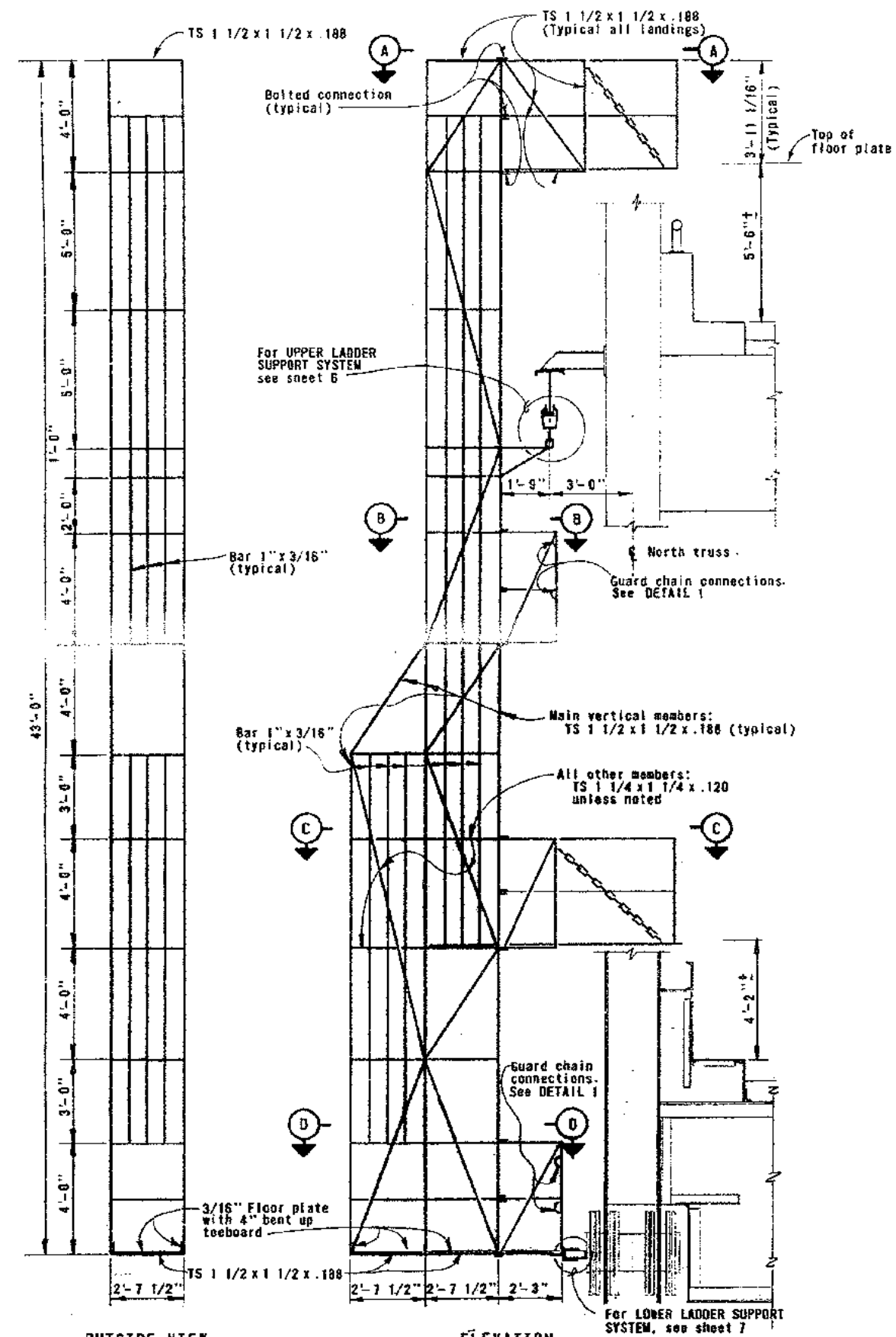
SCALE Unless Noted  
3/8" = 1'-0"

Drawing No. 3	Drawing No. 04-025504-3 R
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04-850-025501

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	Ala	80	00/11		

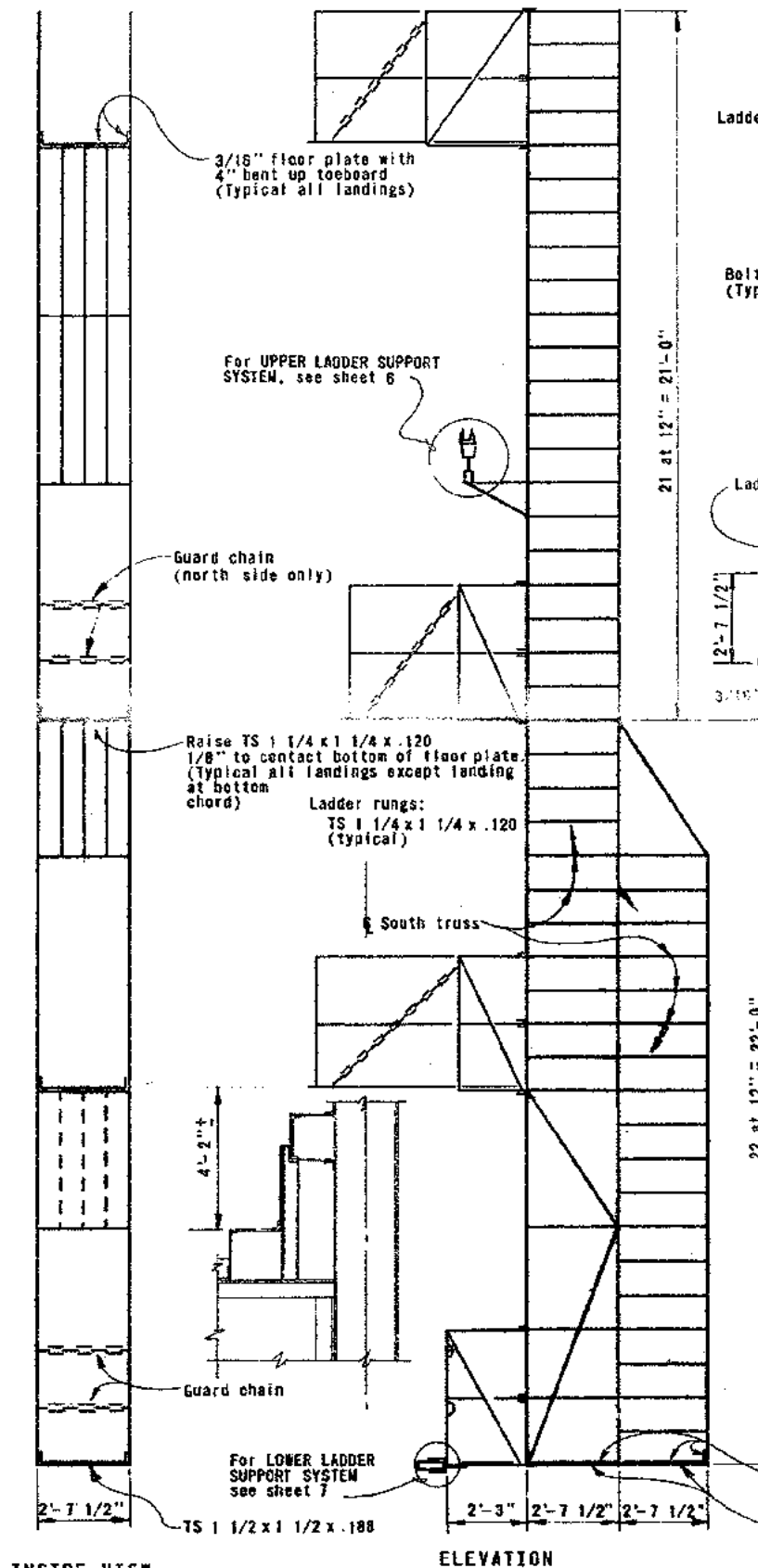
DATE APPROVED May 21, 1979



OUTSIDE VIEW

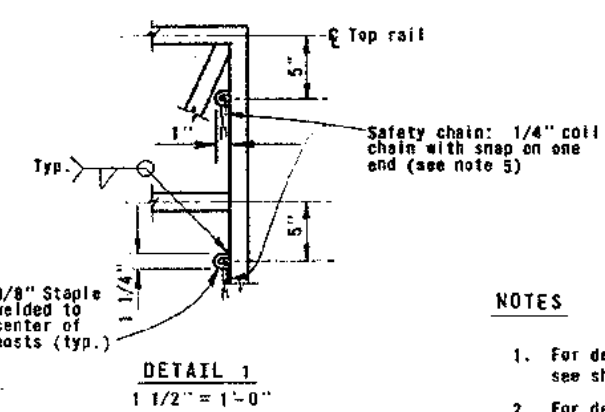
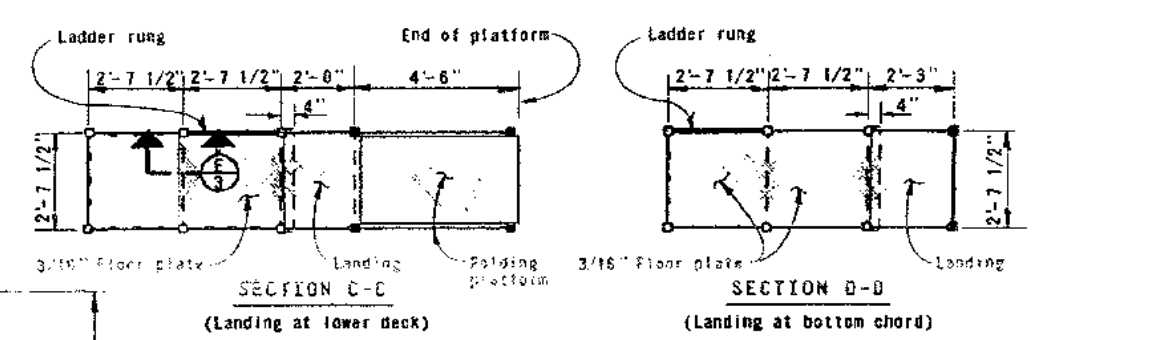
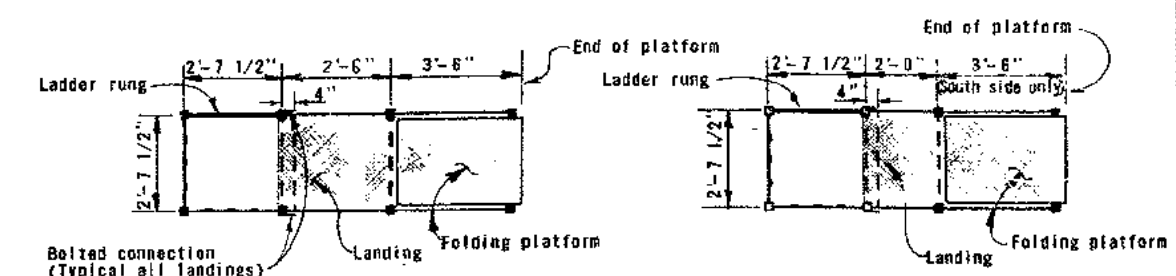
ELEVATION

(Non climbing side shown at north truss; detail at south truss similar except as noted)



INSIDE VIEW

ELEVATION  
(Climbing side)



NOTES

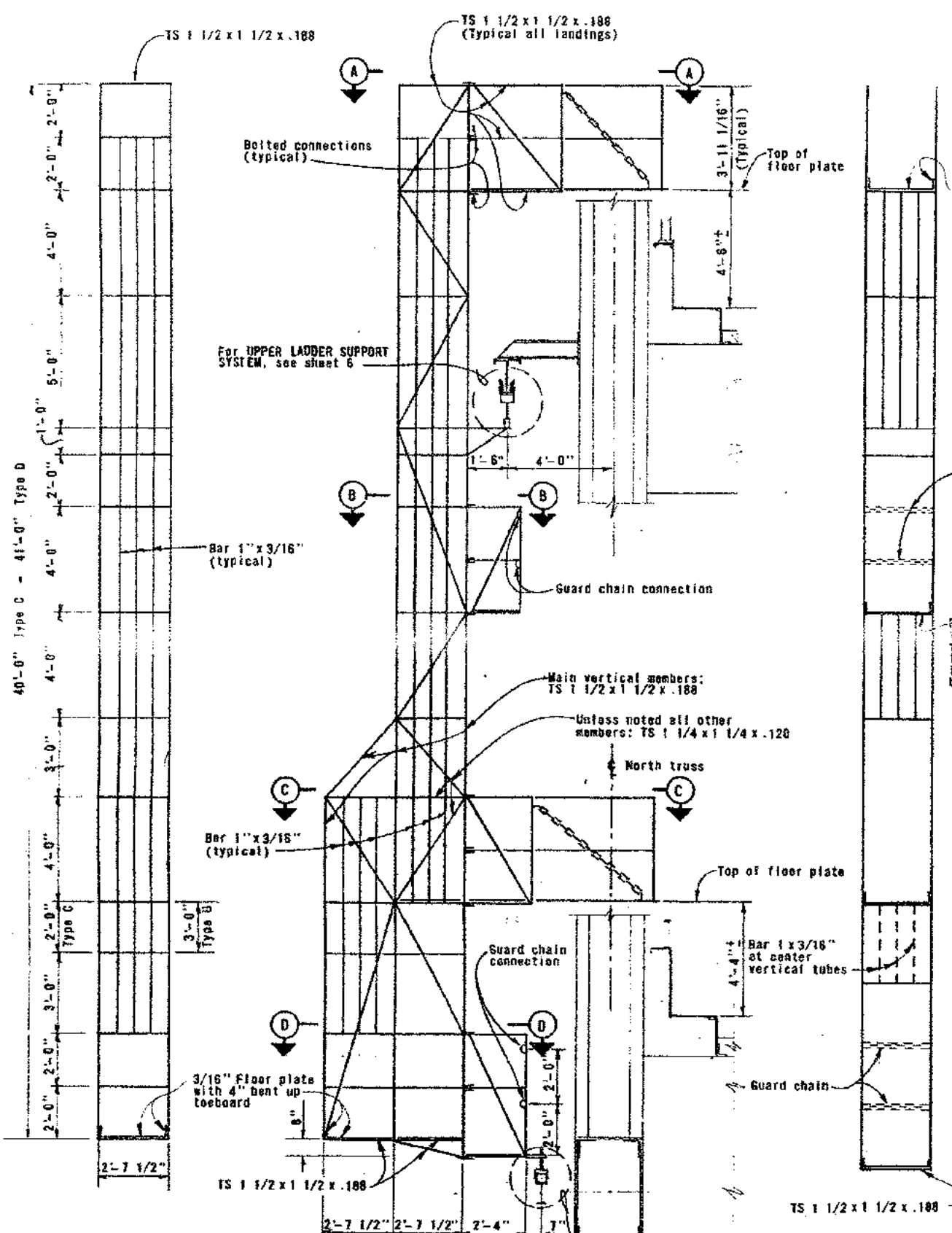
1. For details of landings and folding platforms, see sheet 8.
2. For details of upper support system, see sheet 6.
3. For details of lower support system, see sheet 7.
4. All dimensions shown are to the center of structural tubing unless noted.
5. Guard chain snaps shall be bronze with bronze or stainless steel springs. The snap closure shall not be a flat spring.

Contract No. 04-025504  
 Date Accepted 2-11-81  
 Resident Engineer S. Cooper  
 Design Engineer R. Hoffman Dec 6-15-81

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN BY T. J. [Signature]	CHECKED BY R. B. [Signature]	APPROVED January 29, 1979	
DESIGNED BY R. B. [Signature]	CHECKED BY [Signature]	DESIGN ENGINEER - REG. ENG. C12732	
IN CHARGE OF DESIGN	ESTIMATE BY [Signature]		
3-8S As built with Revision	RC:ART	REGISTERED ENGINEER C15910	
MARK DATE	REVISION	BY	CHECK
SAN FRANCISCO - OAKLAND BAY BRIDGE		MOVABLE LADDER - TYPE B	
EAST BAY LADDERS AND WALKWAYS		SCALE Unless Noted 3/8" = 1'-0"	
DRAWING NO. 04-025504-4R		SHEET NO. 4	

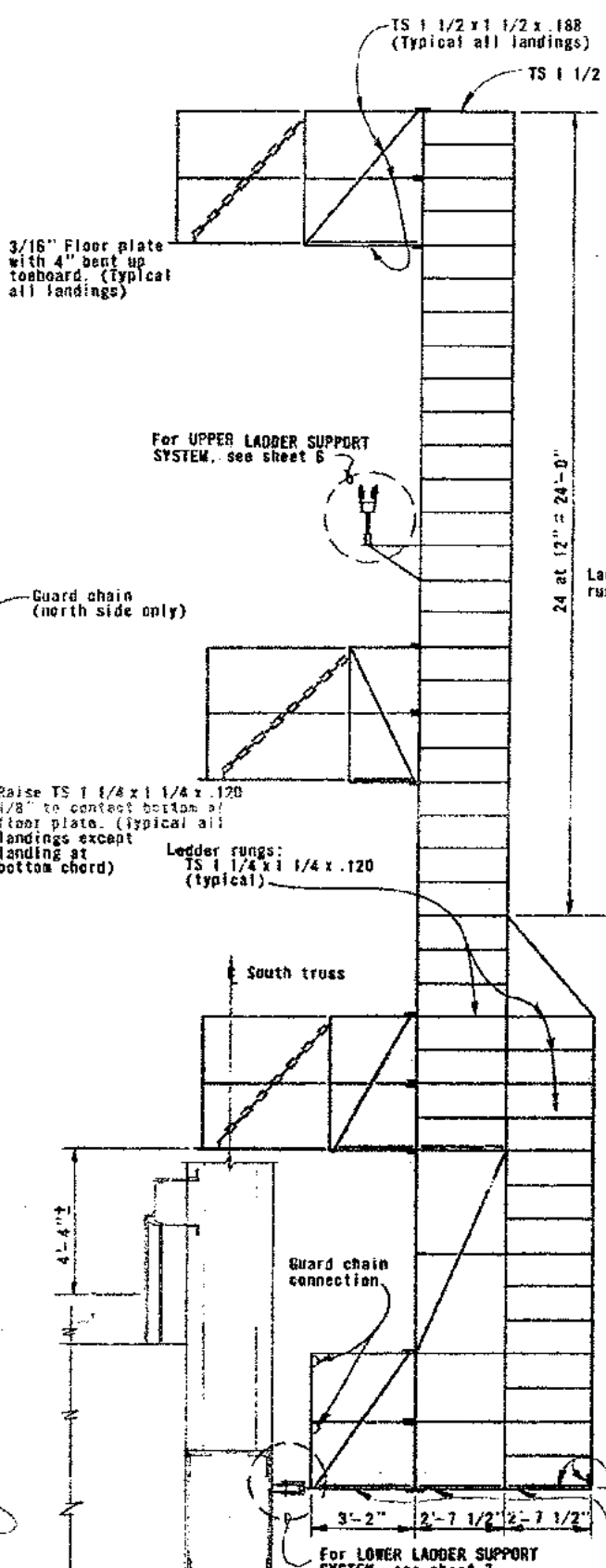
Dist.	County	Route	Permit No.	Sheet No.	Total Sheets
04	SF	80	7.8/8.9	5	26
	A/A	80	0.0/1.1		

DATE APPROVED May 21, 1979



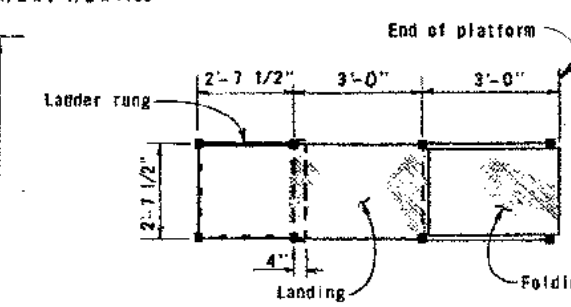
**OUTSIDE VIEW**  
(Type C shown, Type D similar except as noted)

**ELEVATION**  
(Type C shown at north truss, non-climbing side, detail at south truss similar except as noted. Type D similar except as noted)

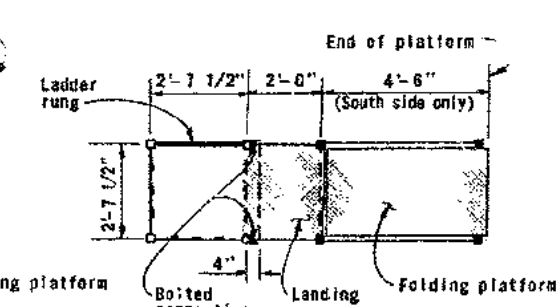


**INSIDE VIEW**  
(Type D shown)

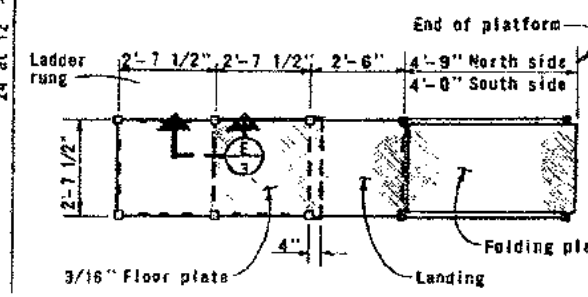
**ELEVATION**  
(Type D shown at south truss, climbing side, Type C similar except as noted)



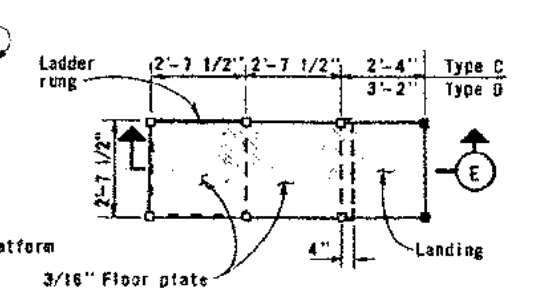
**SECTION A-A**  
(Landing at upper deck)



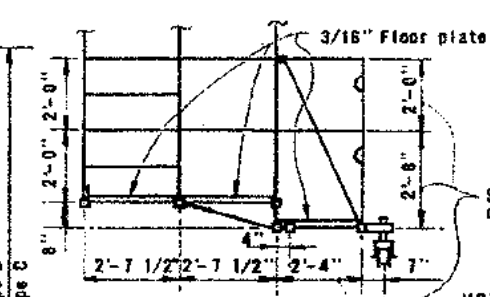
**SECTION B-B**  
(Landing at upper deck scaffold)



**SECTION C-C**  
(Landing at lower deck)



**SECTION D-D**  
(Landing at bottom chord)



**SECTION E-E**  
(Type C only)

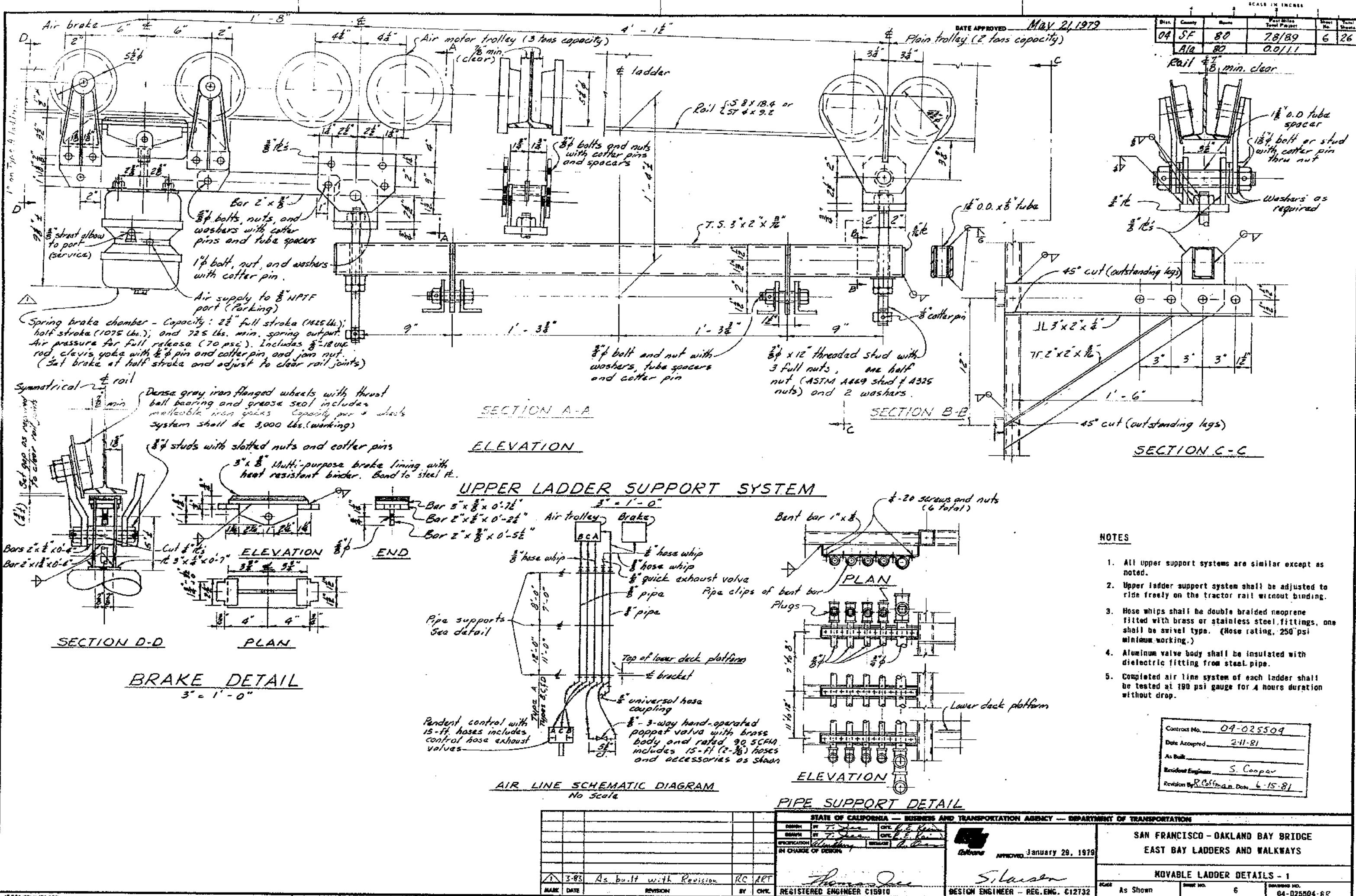
**NOTES**

1. For details of landing and folding platform see sheet 8.
2. For details of upper support system see sheet 6.
3. For details of lower support system see sheet 7.
4. All dimensions shown are to the center of structural tubing unless noted.

Contract No.	04-025504
Date Accepted	2-11-81
By	
Design Engineer	S. Cooper
Reviewed By	R. Hoffman Date 6-15-81

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGNED BY	DATE	CHECKED BY	DATE
DRAWN BY	DATE	CHECKED BY	DATE
IN CHARGE OF DESIGN		APPROVED	
3-85 As built with Revision		APPROVED JANUARY 29, 1979	
MARK	DATE	REVISION	BY
REGISTERED ENGINEER C13918		DESIGN ENGINEER - REG. ENG. C12732	
SAN FRANCISCO - OAKLAND BAY BRIDGE		EAST BAY LADDERS AND WALKWAYS	
MOVABLE LADDERS - TYPES C AND D		SCALE Unless Noted 3/8" = 1'-0"	
5		DRAWING NO. 04-025504-SR	





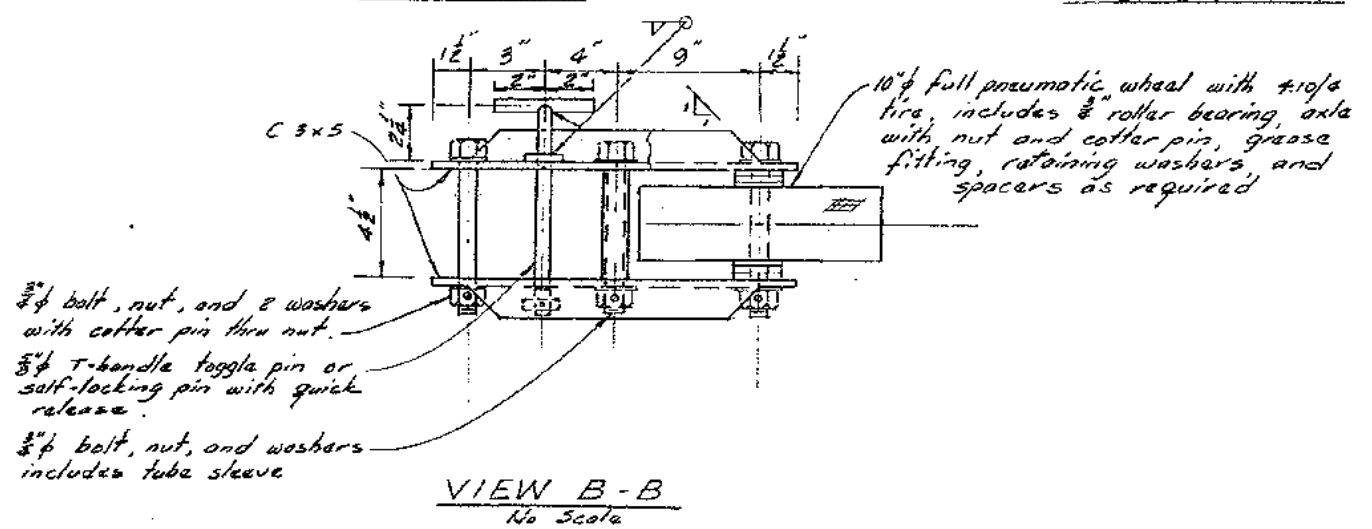
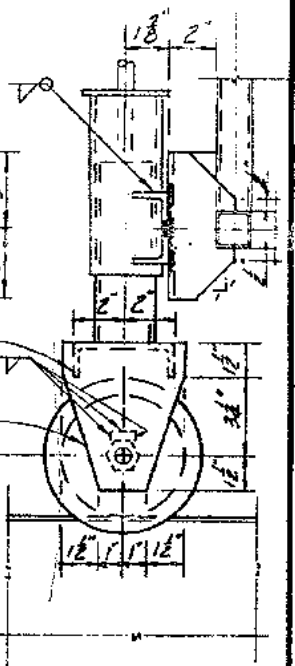
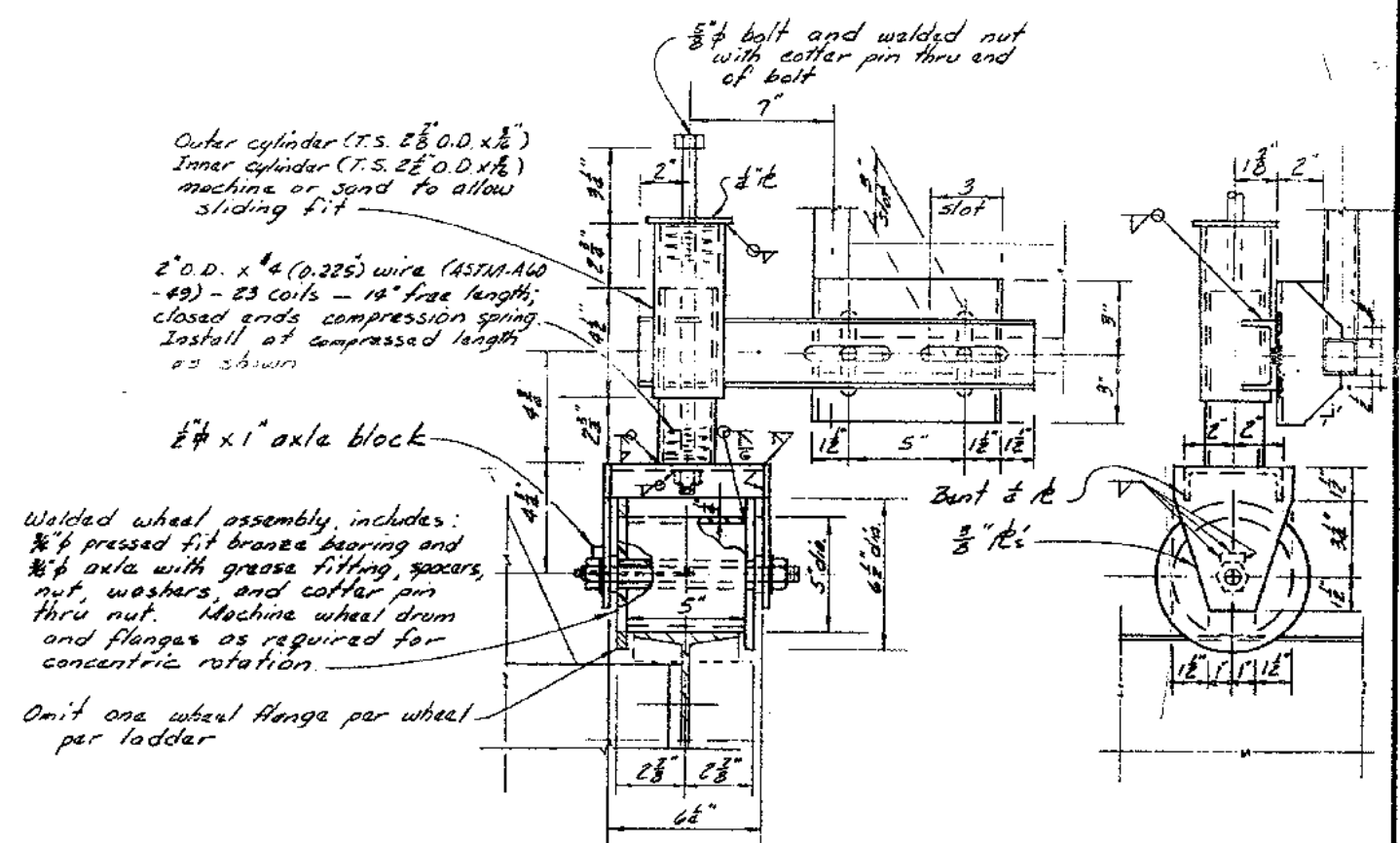
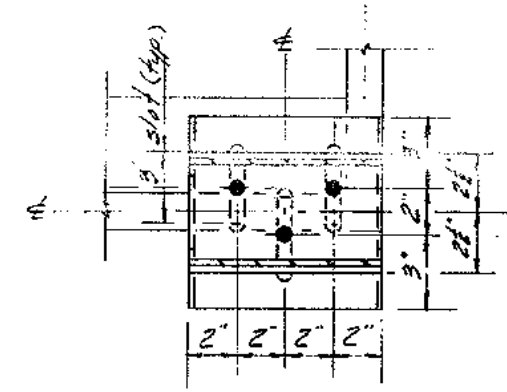
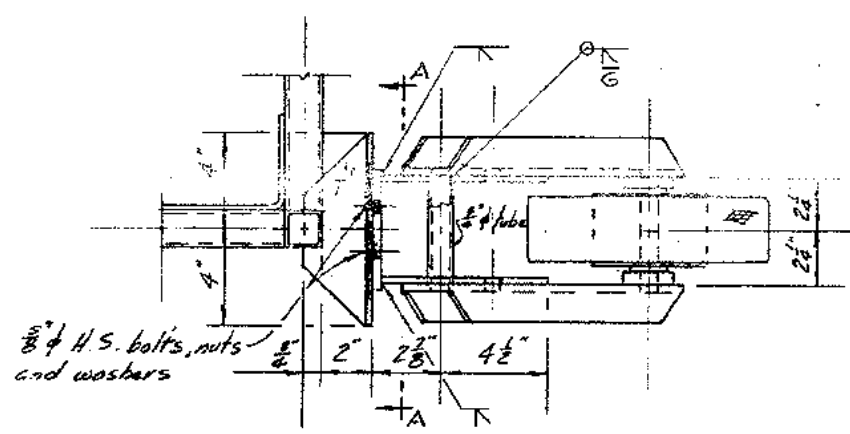
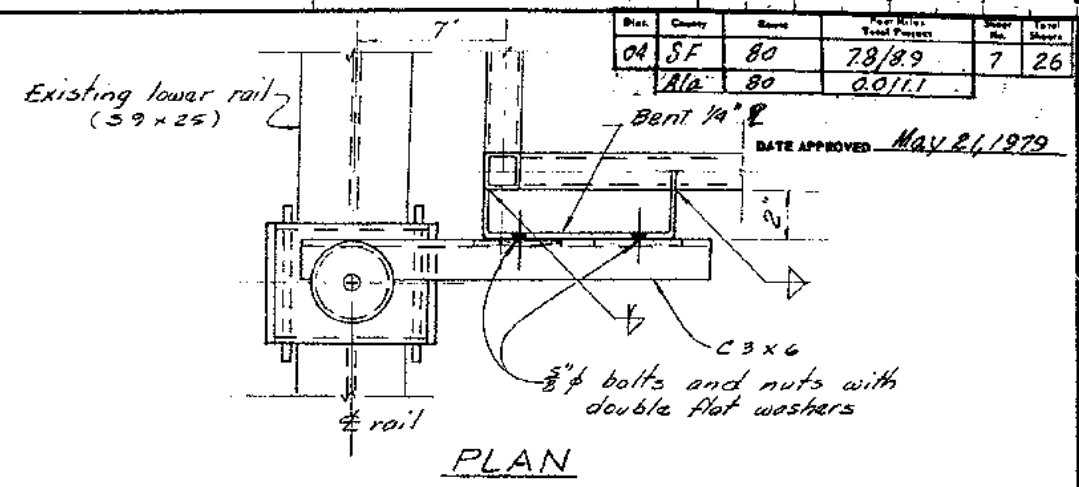
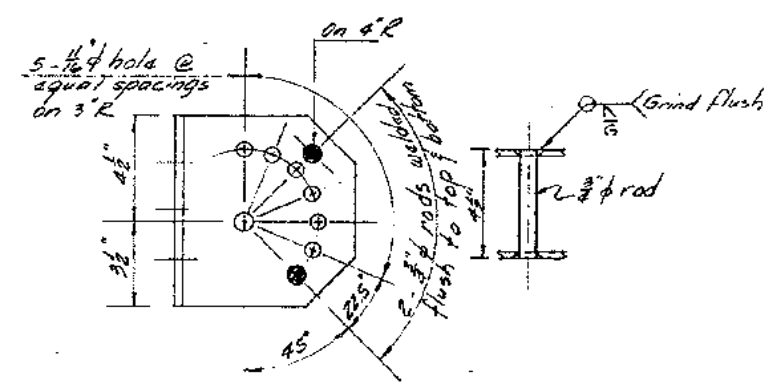
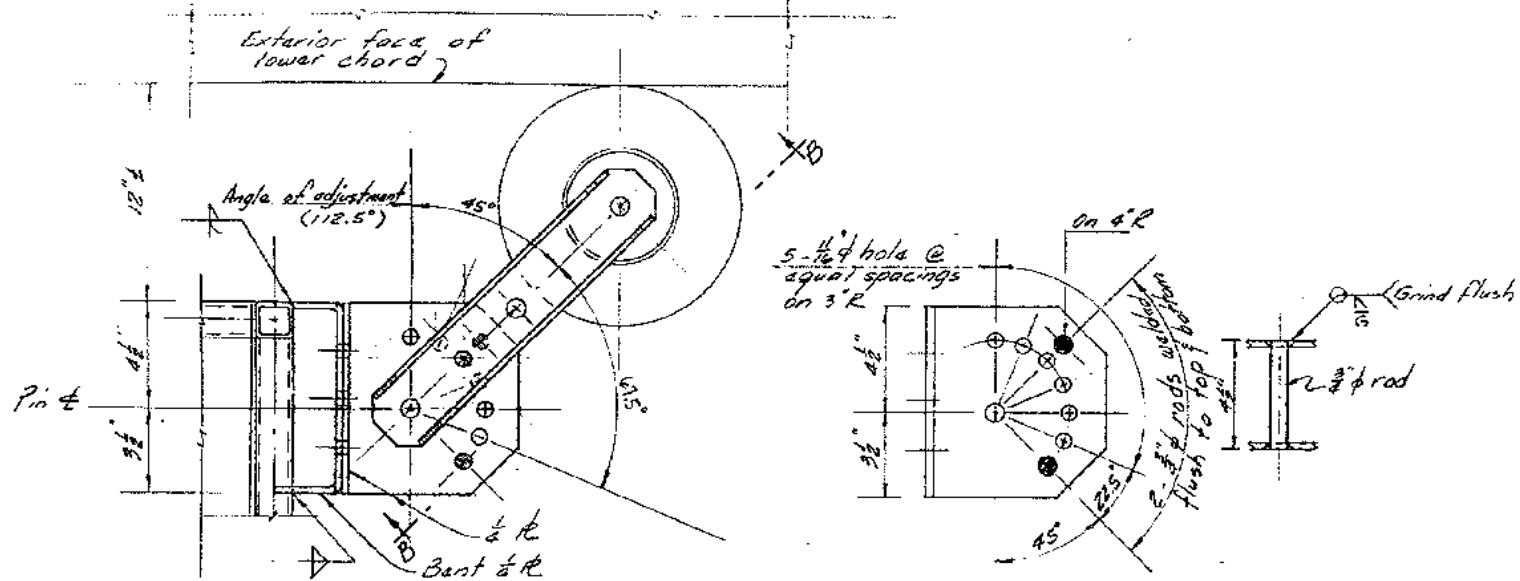
- NOTES
1. All upper support systems are similar except as noted.
  2. Upper ladder support system shall be adjusted to ride freely on the tractor rail without binding.
  3. Hose whips shall be double braided neoprene fitted with brass or stainless steel fittings, one shall be swivel type. (Hose rating, 250 psi minimum working.)
  4. Aluminum valve body shall be insulated with dielectric fitting from steel pipe.
  5. Completed air line system of each ladder shall be tested at 190 psi gauge for 4 hours duration without drop.

Contract No.	04-025504
Date Accepted	2-11-81
As Built	
Resident Engineer	S. Conpar
Revision By	R. Coffman, Date 6-15-81

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN BY	T. J. Lee	CHECKED BY	P. G. Kim
DESIGN BY	T. J. Lee	CHECKED BY	P. G. Kim
SPECIFICATION	Amending	REVISION	1-1
IN CHARGE OF DESIGN			
1-81 As built with Revision RC ART		REGISTERED ENGINEER C15910	
MARK DATE		REVISION	
		BY CHK.	
		DESIGN ENGINEER — REG. ENG. C12732	
		APPROVED January 29, 1979	
		S. Hansen	
		SAN FRANCISCO — OAKLAND BAY BRIDGE	
		EAST BAY LADDERS AND WALKWAYS	
		MOVABLE LADDER DETAILS - 1	
		Scale As Shown	
		Sheet No. 6	
		Drawing No. 04-025504-6R	

Dist.	County	Route	Post Miles Total Project	Sheet No.	Total Sheets
04	SF	80	78/89	7	26
	Ala	80	00/11		



DATE APPROVED May 21, 1979



### LOWER LADDER SUPPORT SYSTEM TYPES 'A', 'B', & 'D' LADDERS

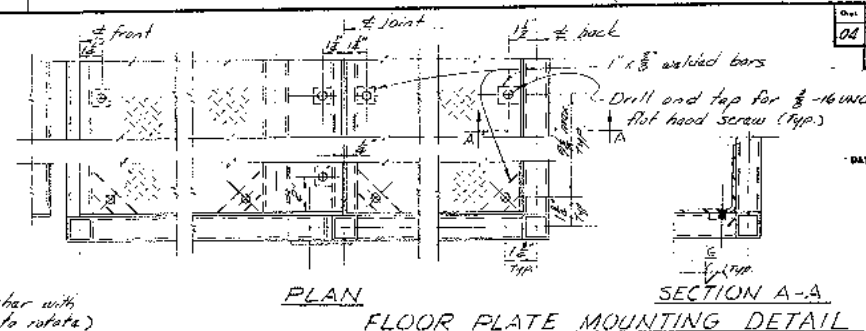
### LOWER LADDER SUPPORT SYSTEM TYPE 'C' LADDERS

Contract No. 04-025504  
Date Accepted 2-11-81  
As Built  
Resident Engineer C. Cooper  
Reviewed R. Coffman Date 6-15-81

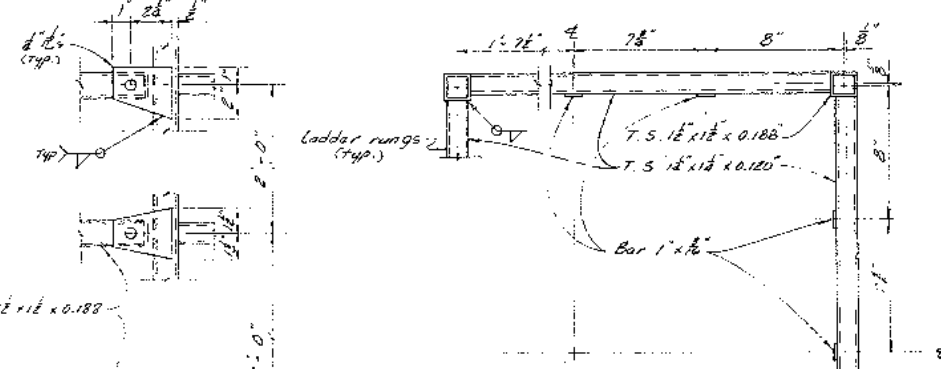
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				DESIGN BY <u>T. J. [Signature]</u> C.E. <u>B. E. Kain</u> DRAWING BY <u>T. J. [Signature]</u> C.E. <u>B. E. Kain</u> SPECIFICATION <u>Blank</u> SIGNATURE <u>B. E. Kain</u> IN CHARGE OF DESIGN		 APPROVED January 29, 1979 <u>S. Larsen</u> REGISTERED ENGINEER C15810	
 3-83 As built without Revision RC ART				SAN FRANCISCO - OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS MOVABLE LADDER DETAILS - 2			
MARK DATE		REVISION		BY C.E.		SCALE As Shown SHEET NO. 7 DRAWING NO. 04-025504-T.R.	
						04-850-025504	



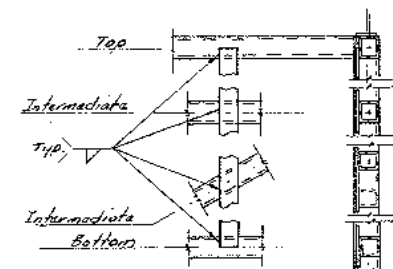
\* DATE APPROVED May 26, 1978



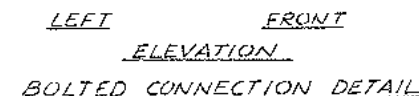
SECTION A-A



PART PLAN





PART ELEVATION  
LADDER CAGE BAR DETAIL



NOTES FOR MOVABLE LADDERS

1. Use full penetration weld at all joints except as noted.
2. All fillet welds shall be 3/16" minimum except as noted.
3. Pins with nut and cotter pin shall be hand tightened to allow free rotation.
4. All bolts shall be ASTM A325 U.S. bolts except as noted.
5. Projected sharp corners and edges on ladder system shall be ground smooth.
6. Open ends of tubes shall be plugged with 1/4" PL and seal welded.

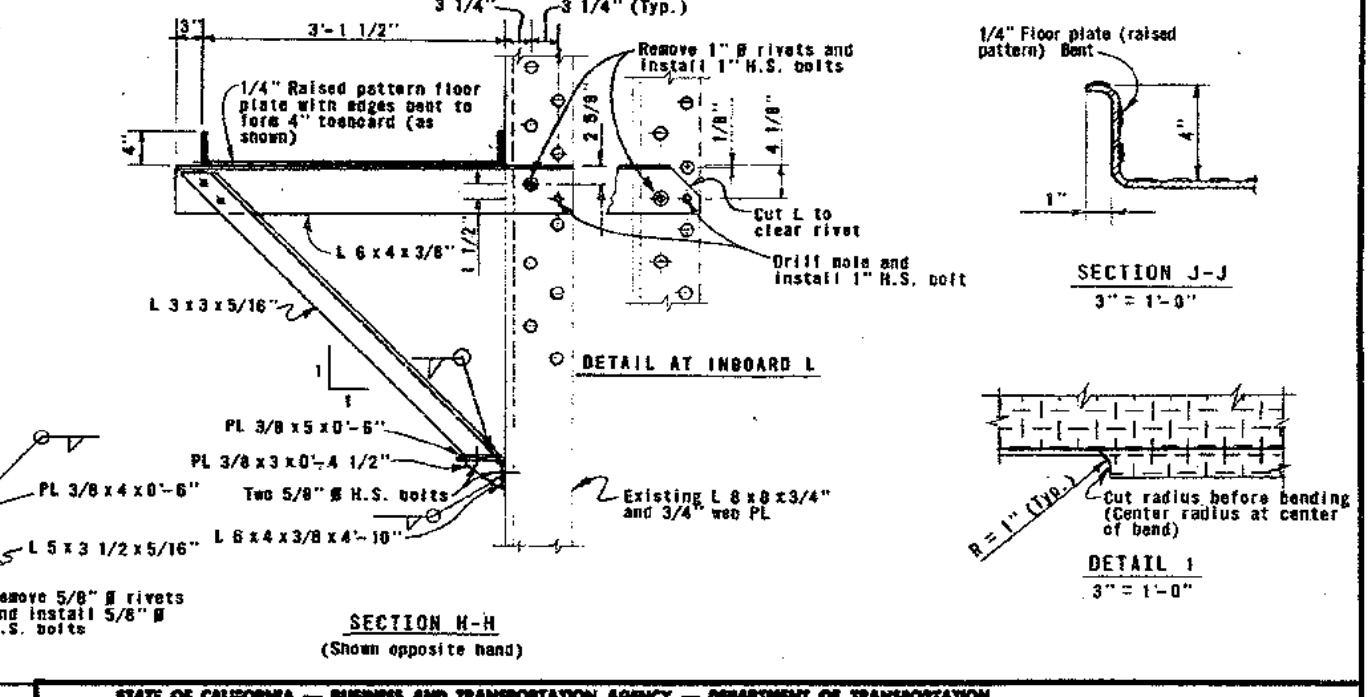
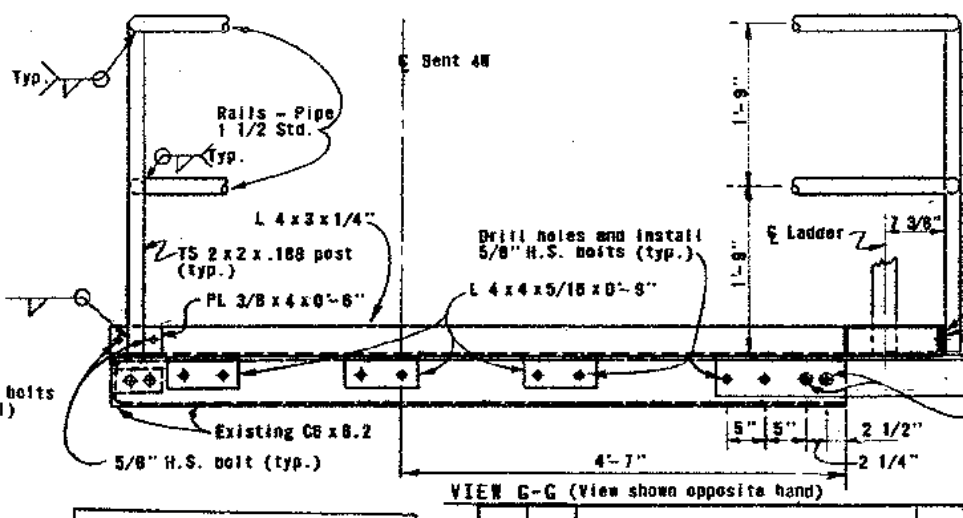
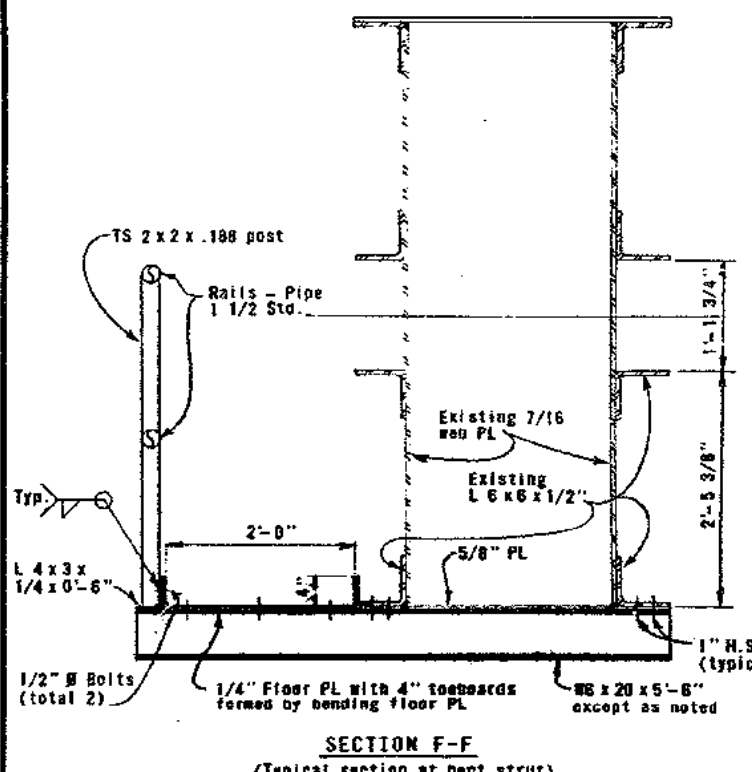
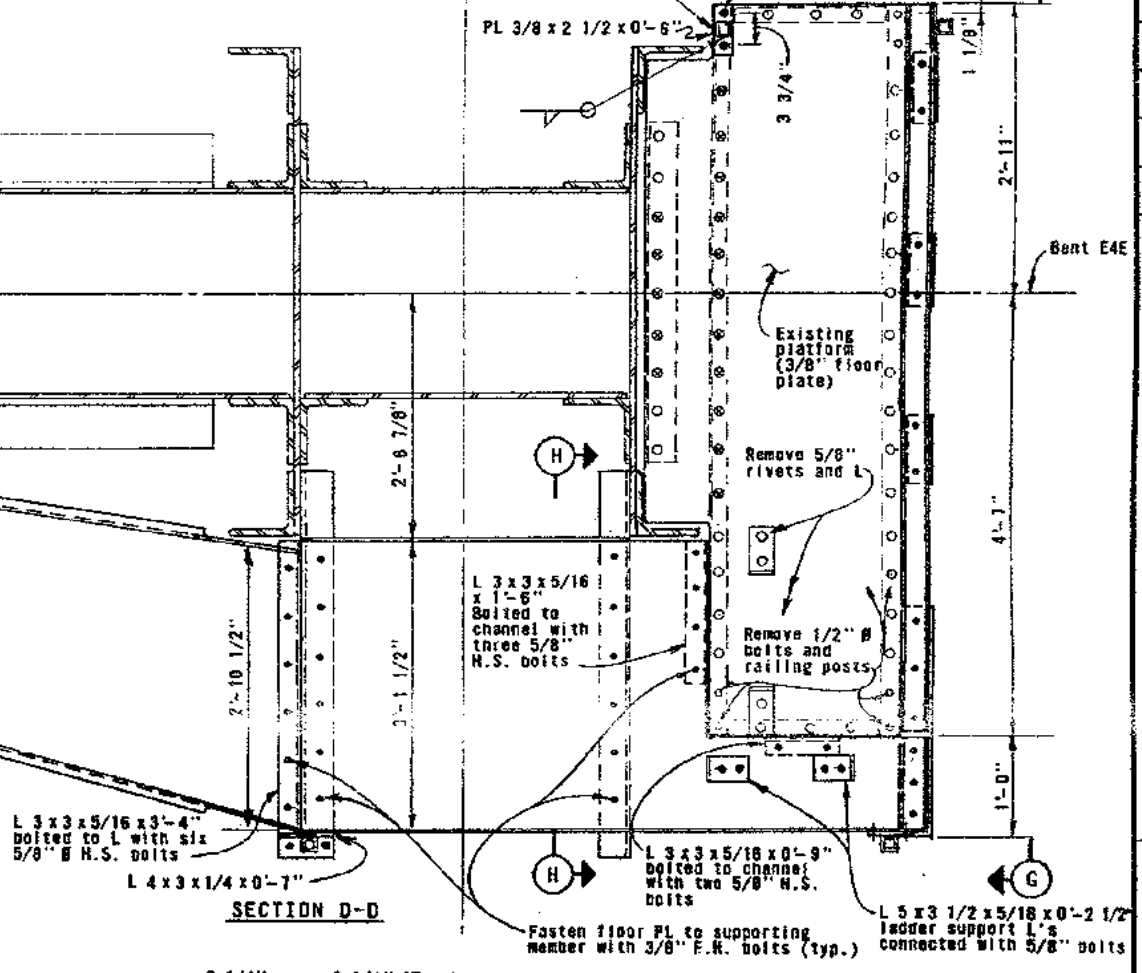
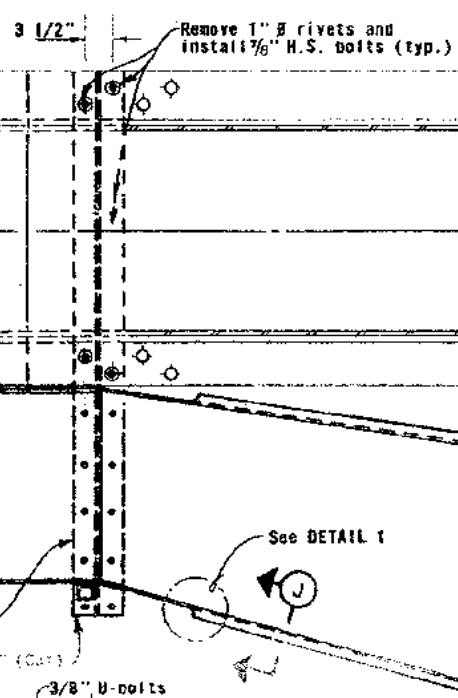
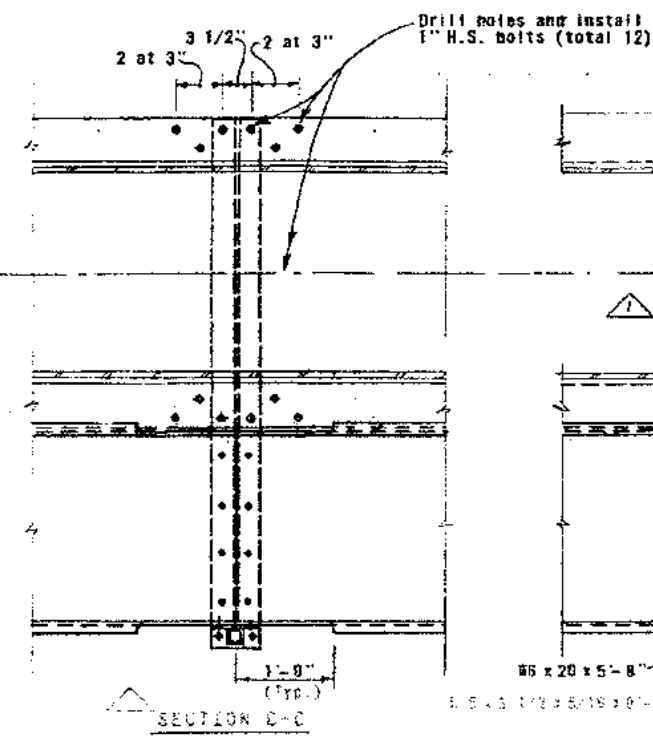
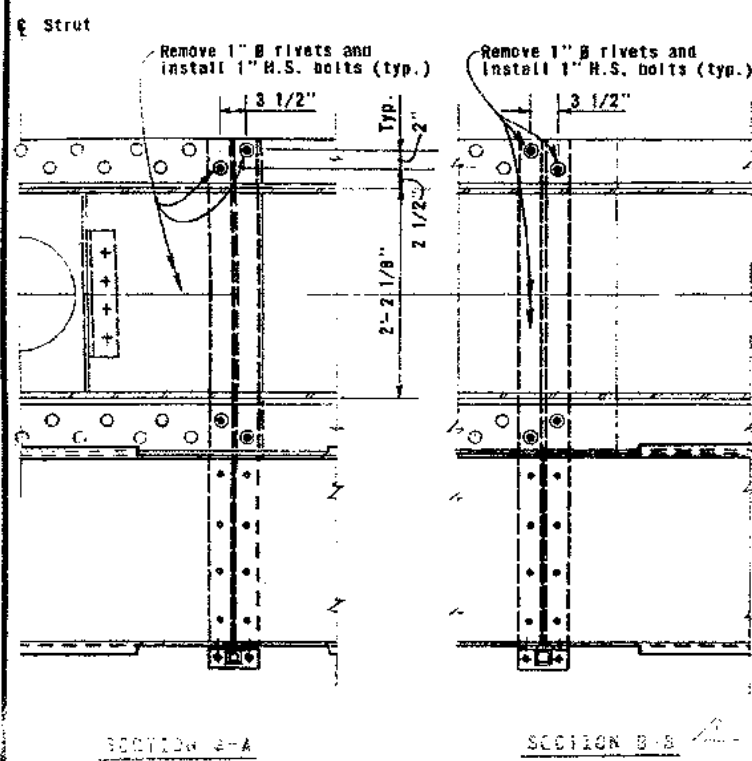
Contract No. 04-025504  
Date Accepted 2-11-81  
As Built \_\_\_\_\_  
Resizing Engineer S. Cooper  
Revision By R. C. G. m. s. s. s. Date 2-17-81

				STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
		DESIGN BY <i>S. Carson</i>	CHECKED BY <i>S. Carson</i>		APPROVED January 28, 1979	SAN FRANCISCO - OAKLAND BAY BRIDGE	
		DESIGNATION <i>W-12</i>	CERTIFIED BY <i>S. Carson</i>			EAST BAY LADDERS AND WALKWAYS	
		IN CHARGE OF DESIGN				MOVABLE LADDER DETAILS - 3	
	3-43	As built without Riser		<i>S. Carson</i>		SCALE 3" = 1'-0"	DRAWING NO. 04-025504-B-RC
DATE	REVISION	BY	CHKD	REGISTERED ENGINEER C19915	DESIGN ENGINEER - REG. ENG. C12732	EXCEPT AS NOTED	



DATE APPROVED May 21, 1979

Dist.	County	Route	Project	Sheet No.	Total Sheets
04	SF	80	7.8/8.9	10	26
	A/R	80	0.0/1.1		



Contract No. 04-025504

Date Accepted 2-11-81

As Built

Resident Engineer S. Cooper

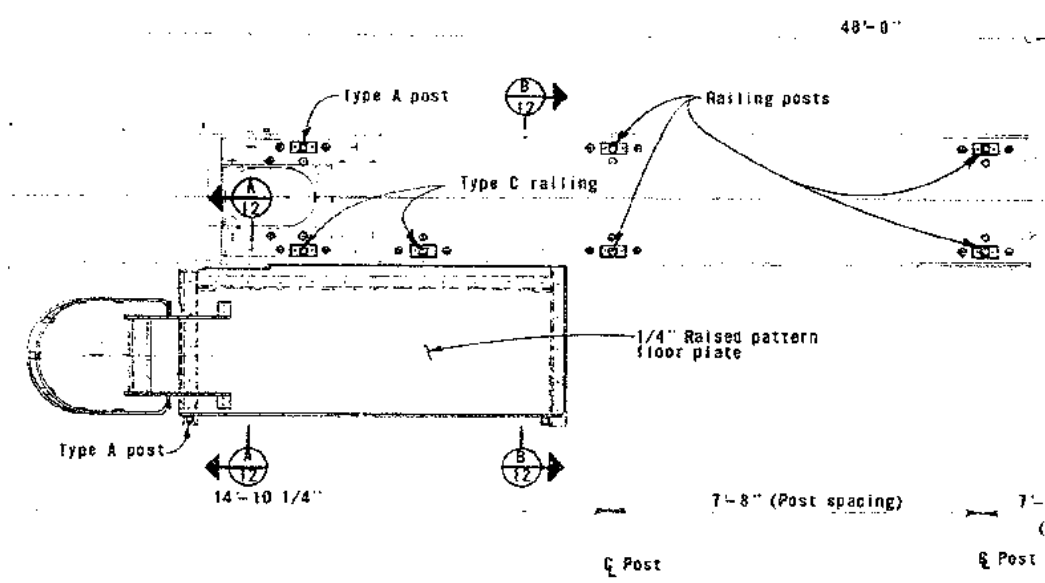
Revision By R.C. Art Date 6-17-81

NO.	DATE	REVISION	BY	CHK.
1	3-83	As built with revisions	R.C. ART	

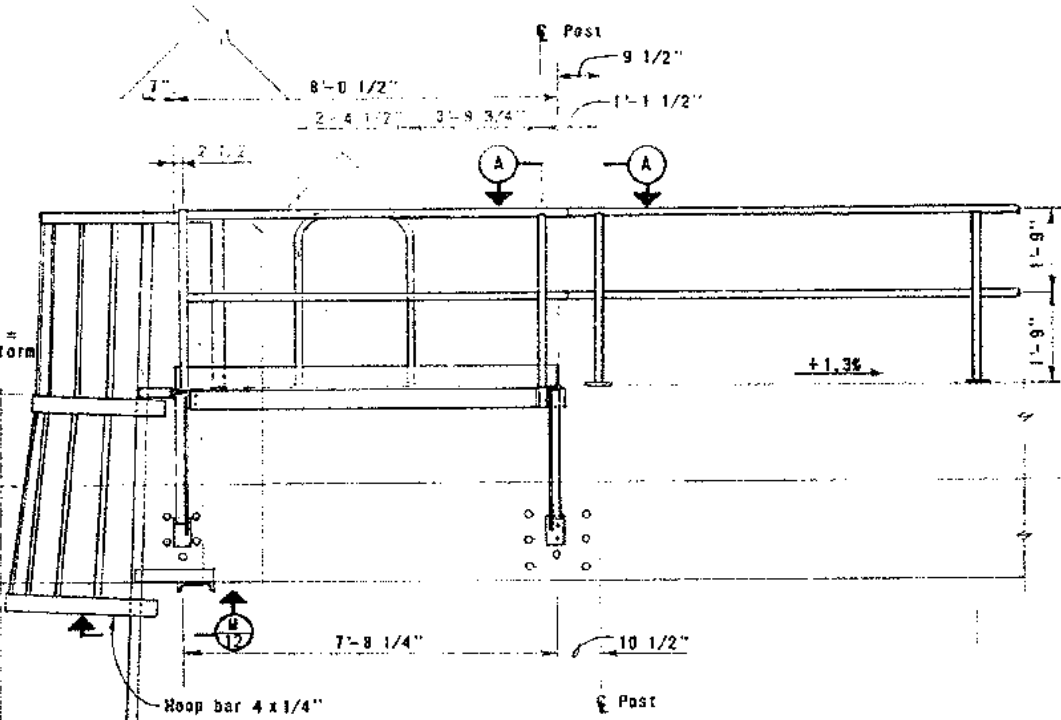
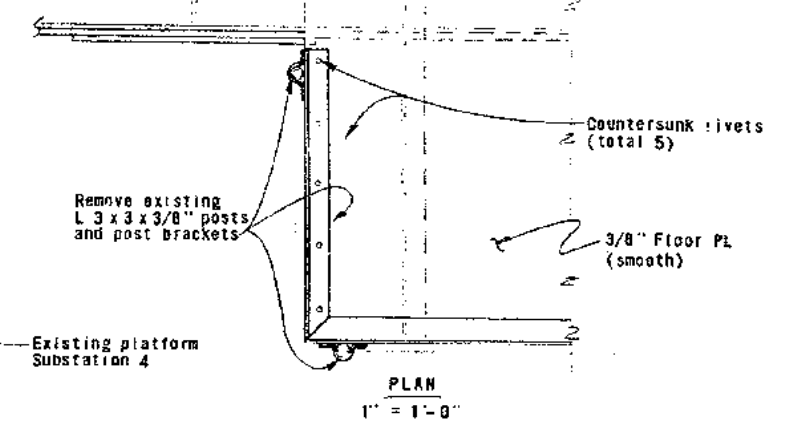
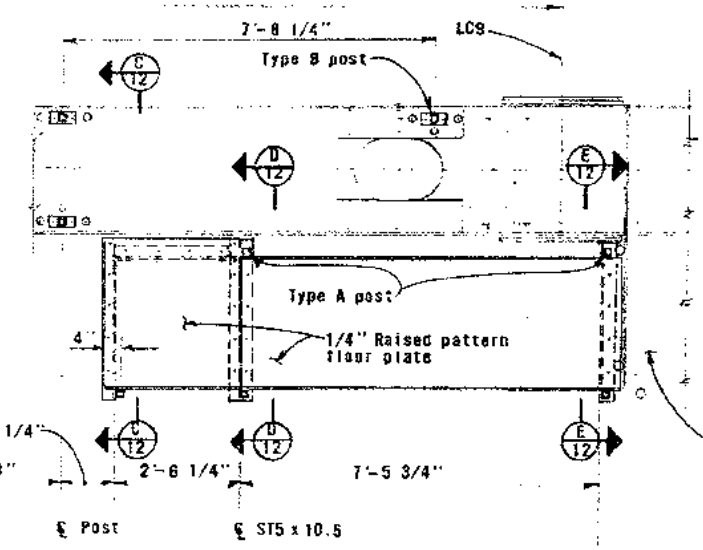
STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION	
DESIGN BY <u>P.E. Knepper</u> CHK. <u>T. J. Jones</u>	APPROVED January 29, 1979
SEAL <u>P.E. Knepper</u> REG. ENG. <u>P.E. Jones</u>	
IN CHARGE OF DESIGN <u>Thomas Jones</u>	
SAN FRANCISCO - OAKLAND BAY BRIDGE	
EAST BAY LADDERS AND WALKWAYS	
WALKWAY AT PIER E4 - 2	
SCALE Unless Noted 1" = 1'-0"	SHEET NO. 10
REGISTERED ENGINEER C15910	DESIGN ENGINEER - REG. ENG. C12792
04-025504-10 R	

Dist.	County	Route	Post Miles Total Project	Sheet No.	Total Sheets
04	SF	80	78/8.9	11	26
119	80	0.0/1.1			

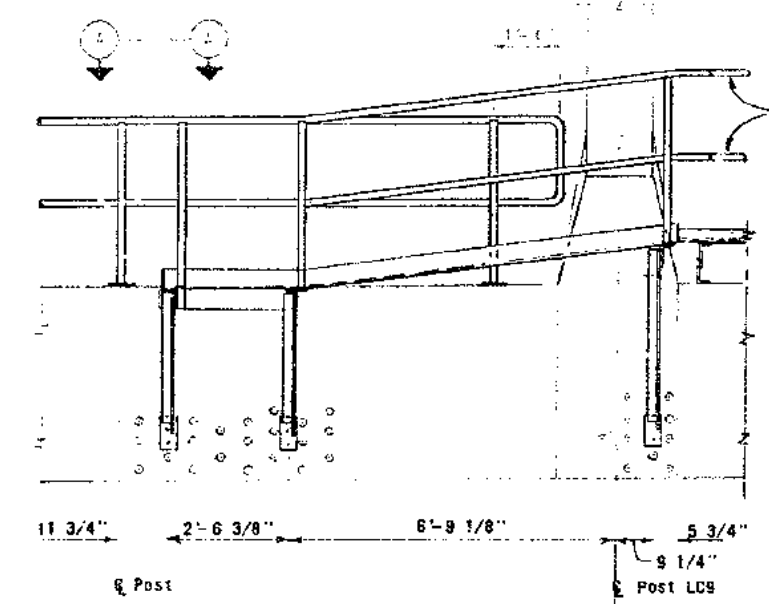
DATE APPROVED May 21, 1979



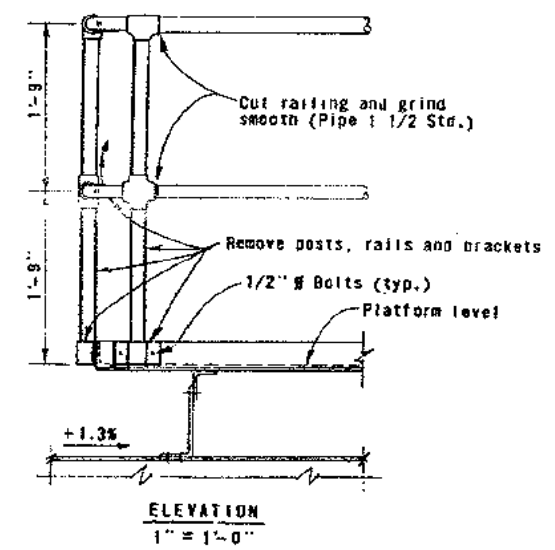
PLAN



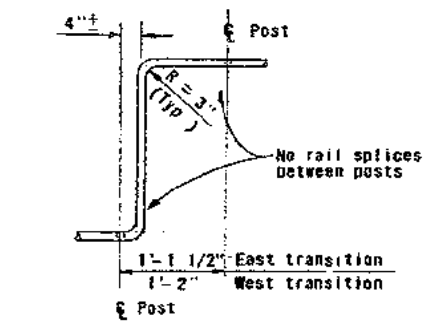
NORTH ELEVATION



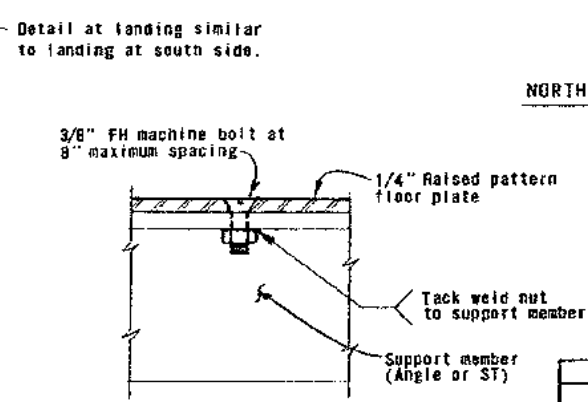
Existing railing, see REMOVAL DETAILS



REMOVAL DETAILS  
(At existing platform - Substation 4)



VIEW A-A  
(Plan - Railing Transition Detail  
Top and middle rail similar)



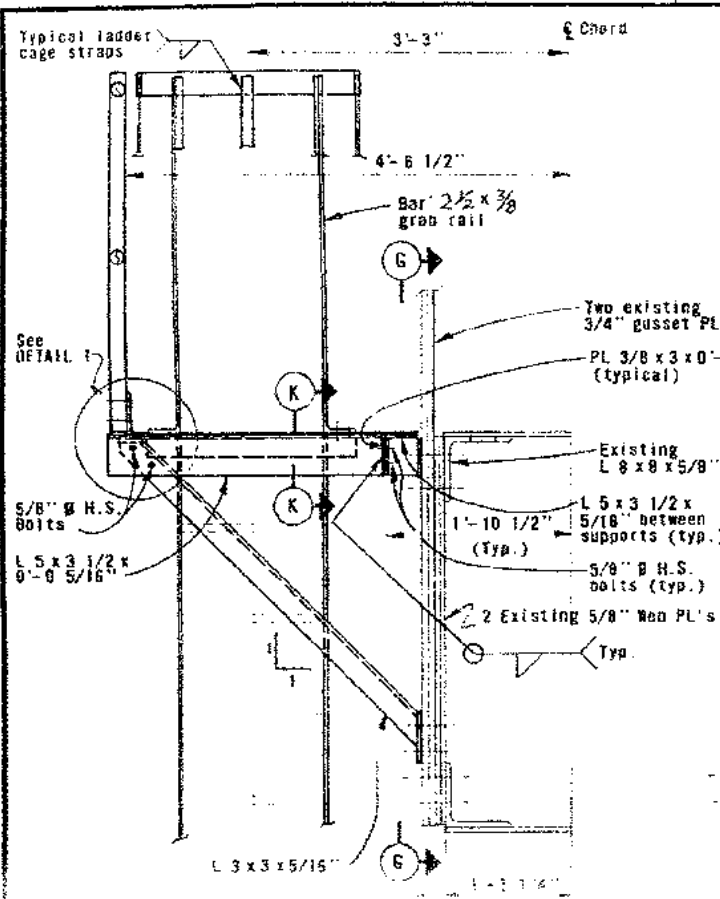
FLOOR PLATE ATTACHMENT DETAIL  
Half Scale

Contract No. 04-025504  
 Date Accepted 2-11-81  
 By RC  
 Checked by S. Cooper  
 Approved by R. Coffman Date 6-17-81

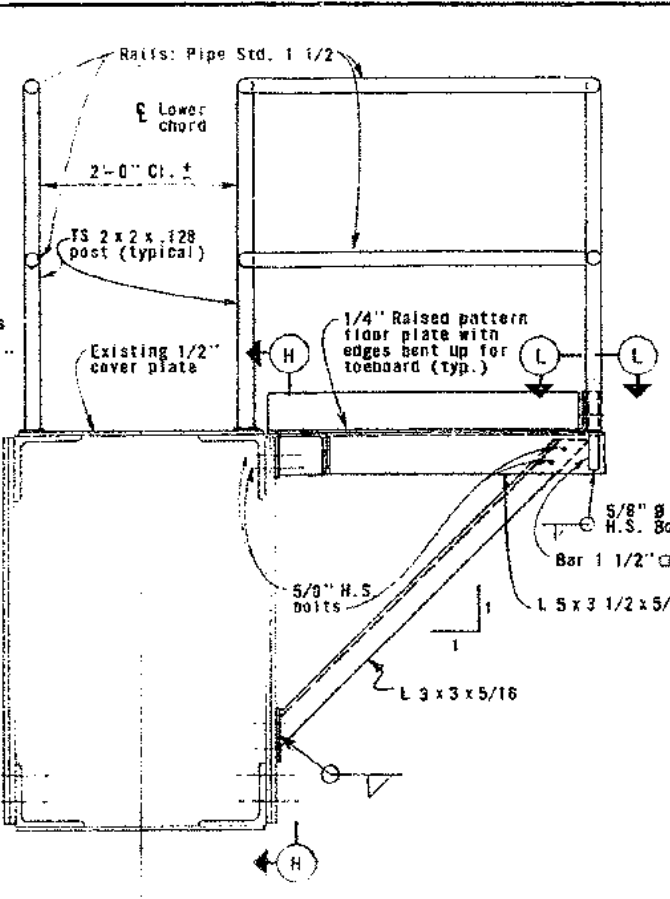
STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION			
DESIGN	BY <u>RC</u>	CHECKED BY <u>ART</u>	DATE <u>1-29-79</u>
DESIGNED BY <u>RC</u>	IN CHARGE OF DESIGN <u>RC</u>	REGISTERED ENGINEER C15910	DESIGN ENGINEER - REG. ENG. C12732
APPROVED January 29, 1979		S. Larsen	
SAN FRANCISCO OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS WALKWAY AT PIER E4 - 3			
UNLESS NOTED 1/2" = 1'-0"	DRAWING NO. <u>11</u>	PROJECT NO. <u>04-025504-11R</u>	

Dist	Count	Rate	Permits	Sheet	Total
04	SF	80	7.8/89	12	26
	A12	80	0.0/1.1		

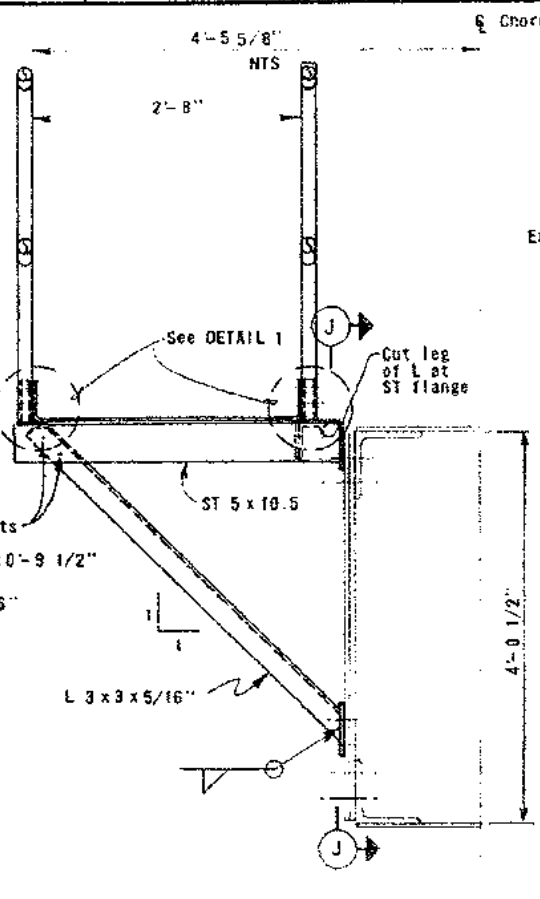
DATE APPROVED May 21, 1979



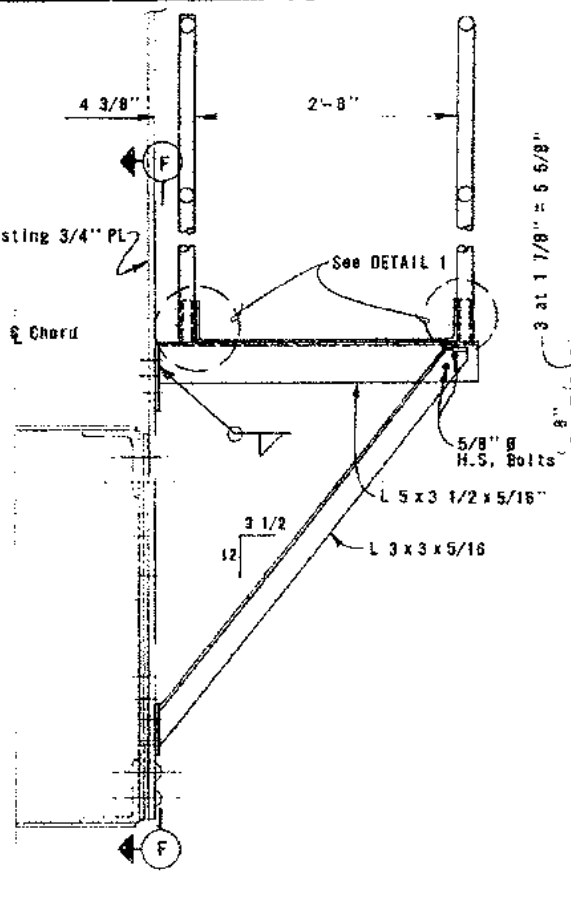
SECTION A-A



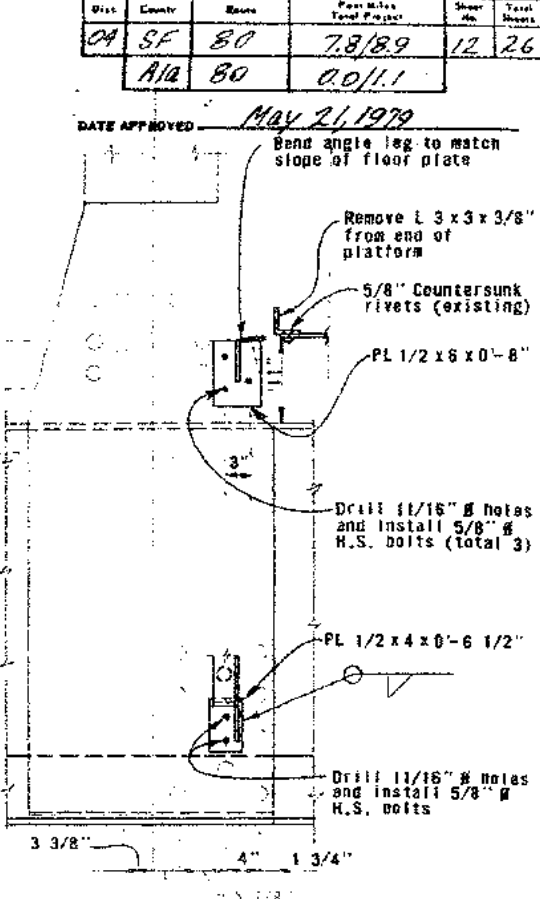
SECTION B-B  
(SECTION C-C, opposite hand)  
1" = 1'-0"



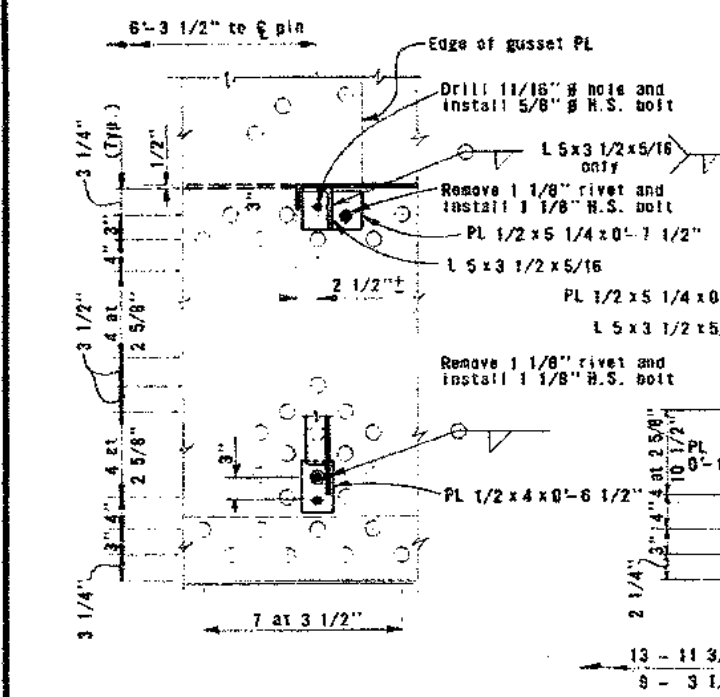
SECTION D-D



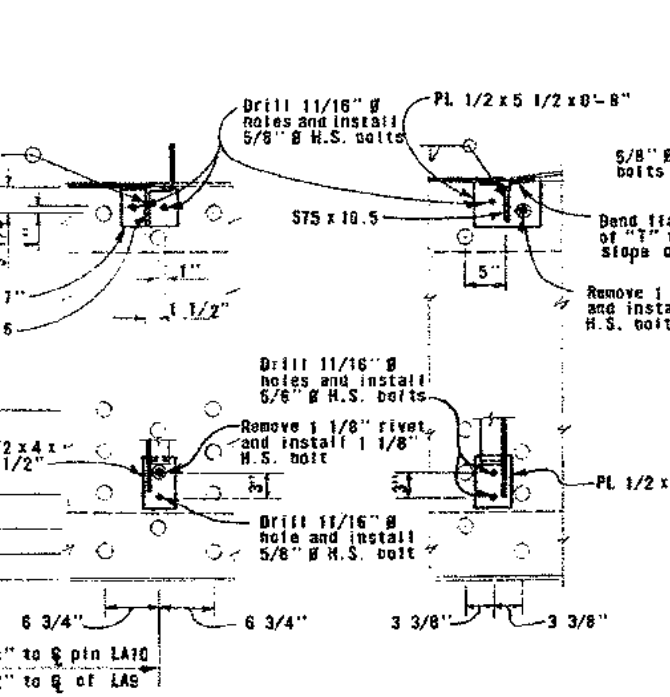
SECTION E-E



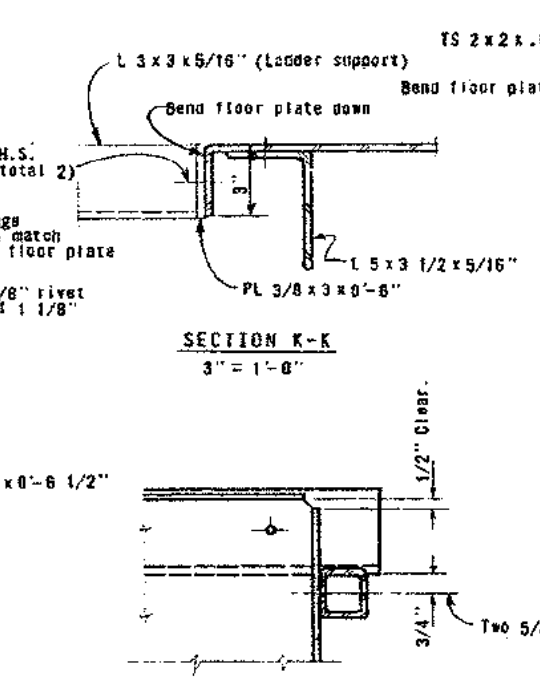
SECTION F-F



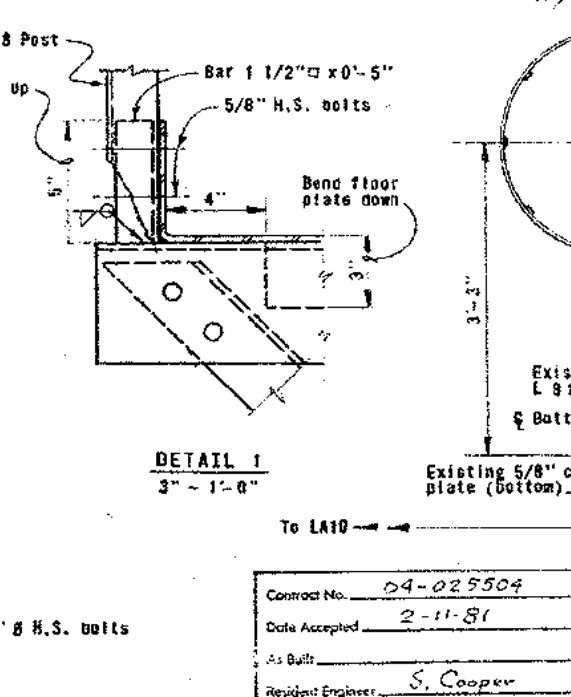
SECTION G-G



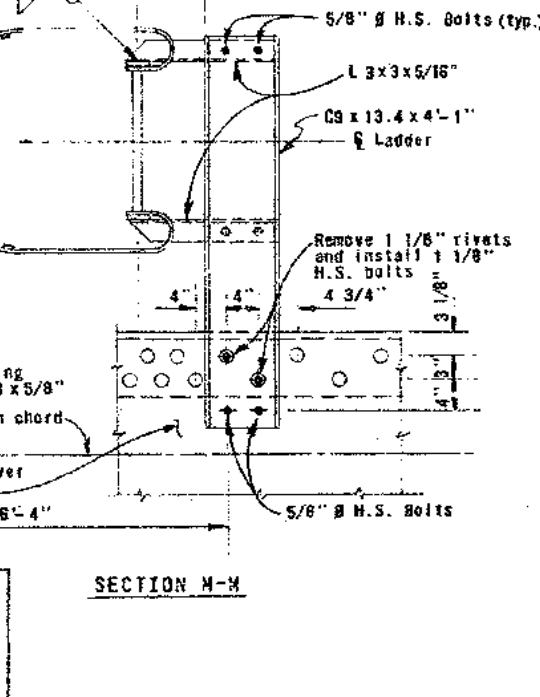
SECTION H-H



SECTION I-I  
3" = 1'-0"



SECTION J-J



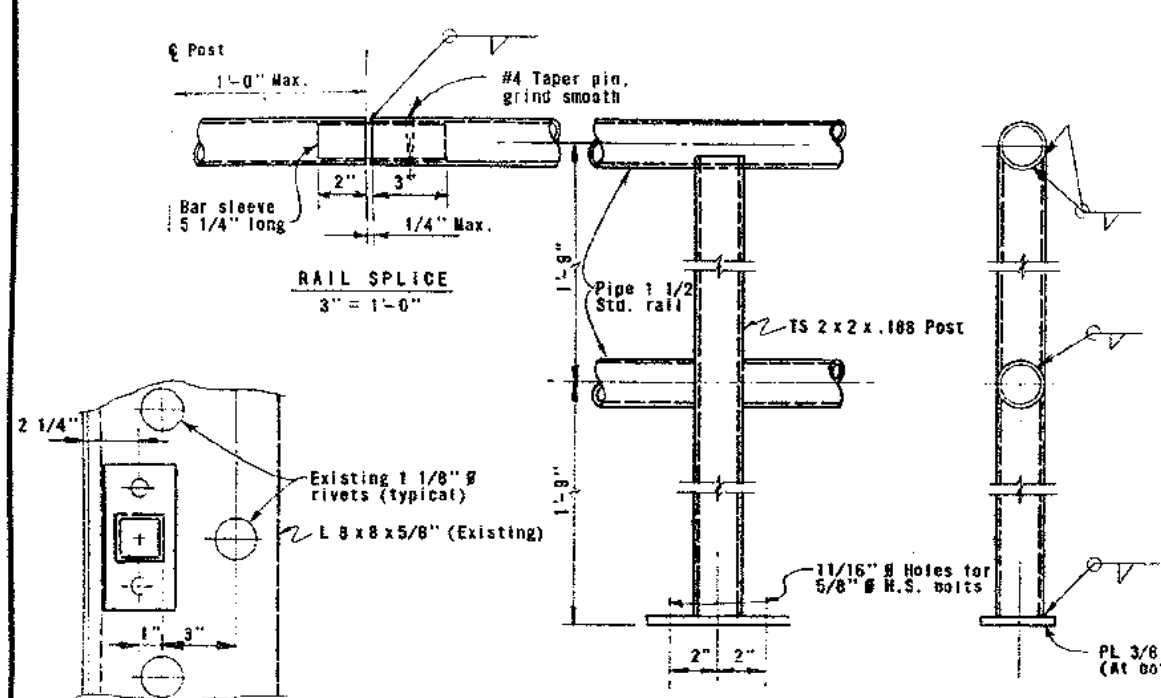
SECTION K-K

Contract No. 04-025504  
 Date Accepted 2-11-81  
 As Built  
 Resident Engineer S. Cooper  
 Division San Francisco Date 6-17-81

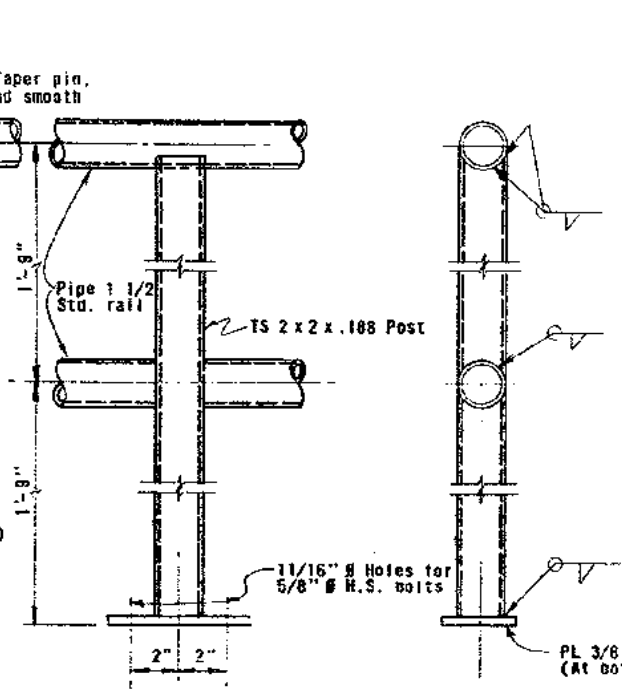
STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION			
DESIGN BY <u>P. E. K...</u>	CHECKED BY <u>P. E. K...</u>	APPROVED <u>January 29, 1979</u>	
DRAWN BY <u>McGowan/...</u>	CHECKED BY <u>P. E. K...</u>	DESIGN ENGINEER - REG. ENG. G12732	
IN CHARGE OF DESIGN <u>P. E. K...</u>	REGISTERED ENGINEER G15910	SAN FRANCISCO - OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS WALKWAY AT PIER E4 - 4	
MARK DATE	REVISION	BY	CHK
1	3-83 As built without revisions	RC	ART
UNLESS NOTED 1" = 1'-0"		DRAWING NO. 04-025504-12R	

Dist	County	Sheet	Post Miles	Total Project	Sheet No.	Total Sheets
04	SF	80	78/89	13	26	
	A12	80	00/11			

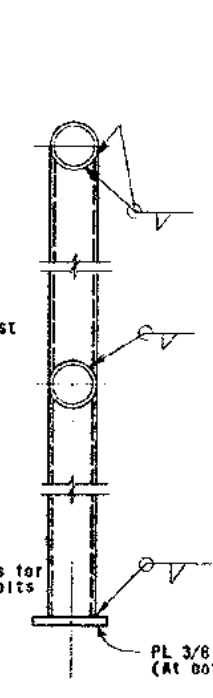
DATE APPROVED May 21, 1979



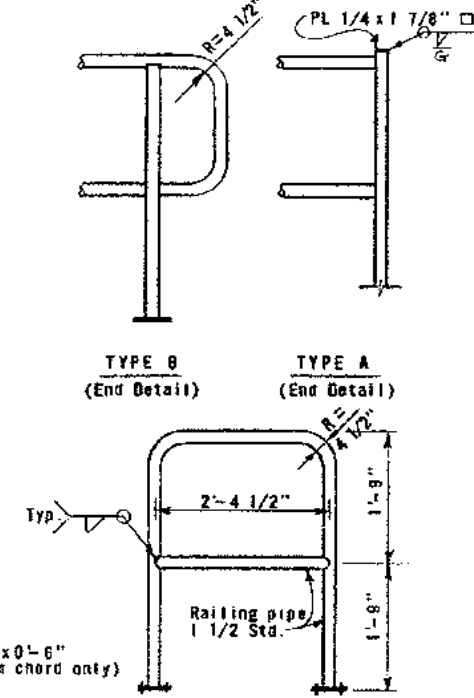
**PLAN**  
(At base PL on chord member)  
3' = 1'-0"



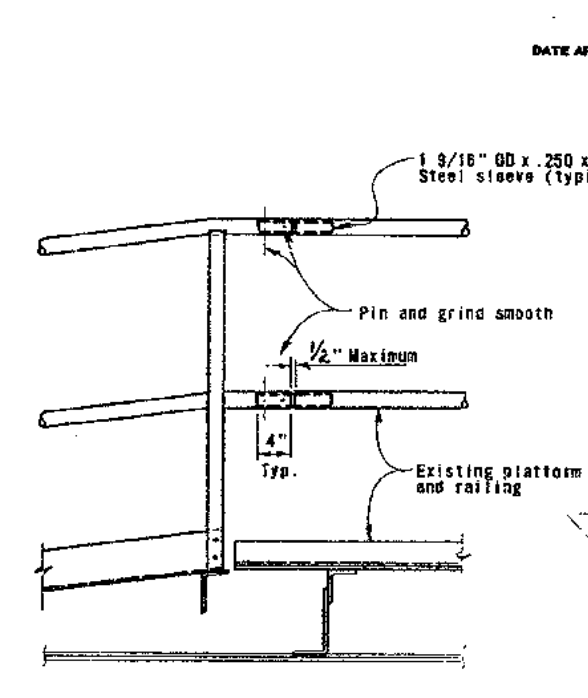
**ELEVATION**  
3' = 1'-0"



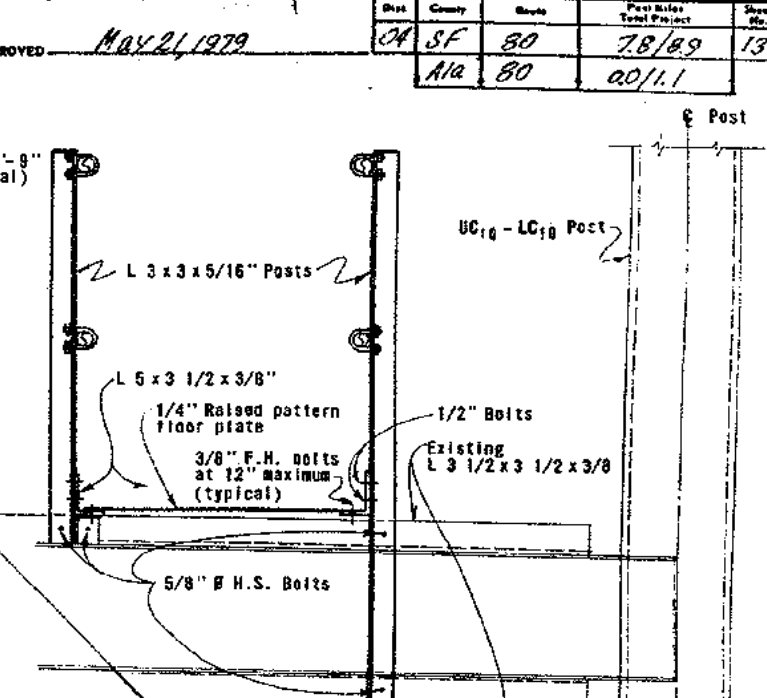
**TYPICAL SECTION**  
3' = 1'-0"



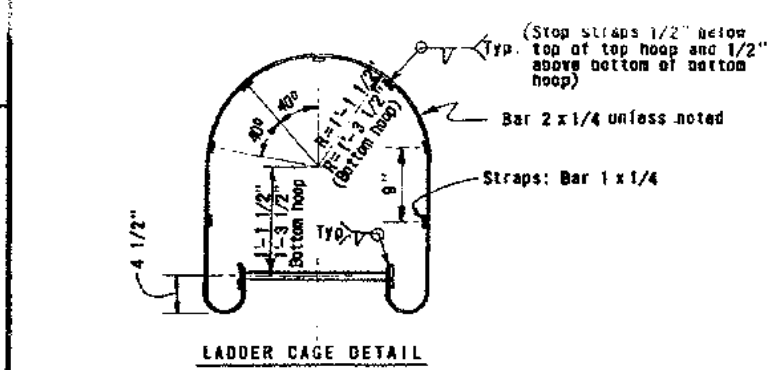
**TYPE C**  
**SPECIAL DETAILS**



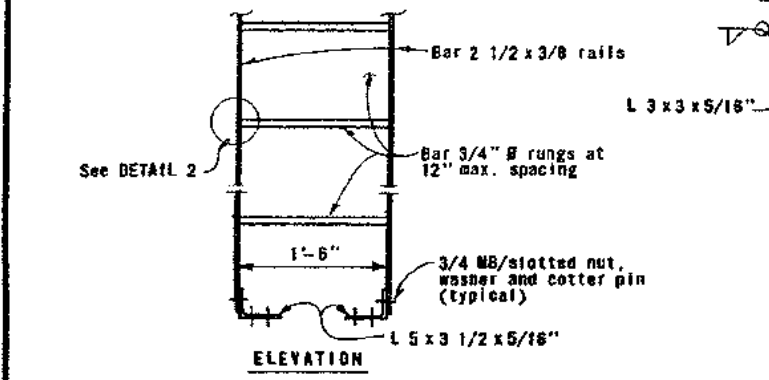
**ELEVATION**  
(Detail at existing platform north side)



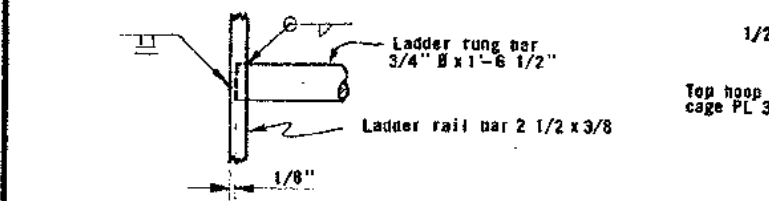
**SECTION A-A**  
(Section cut on sheet 9)



**LADDER CAGE DETAIL**

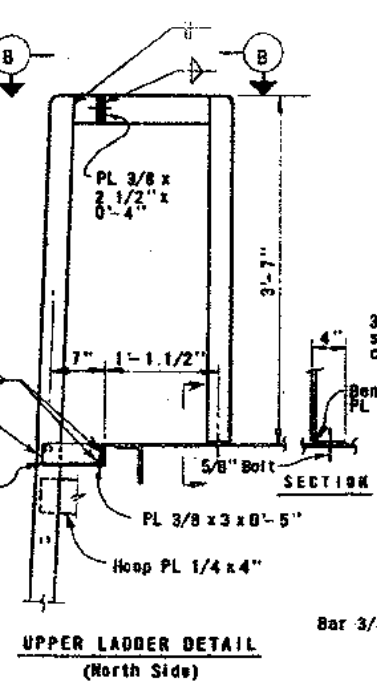


**ELEVATION**

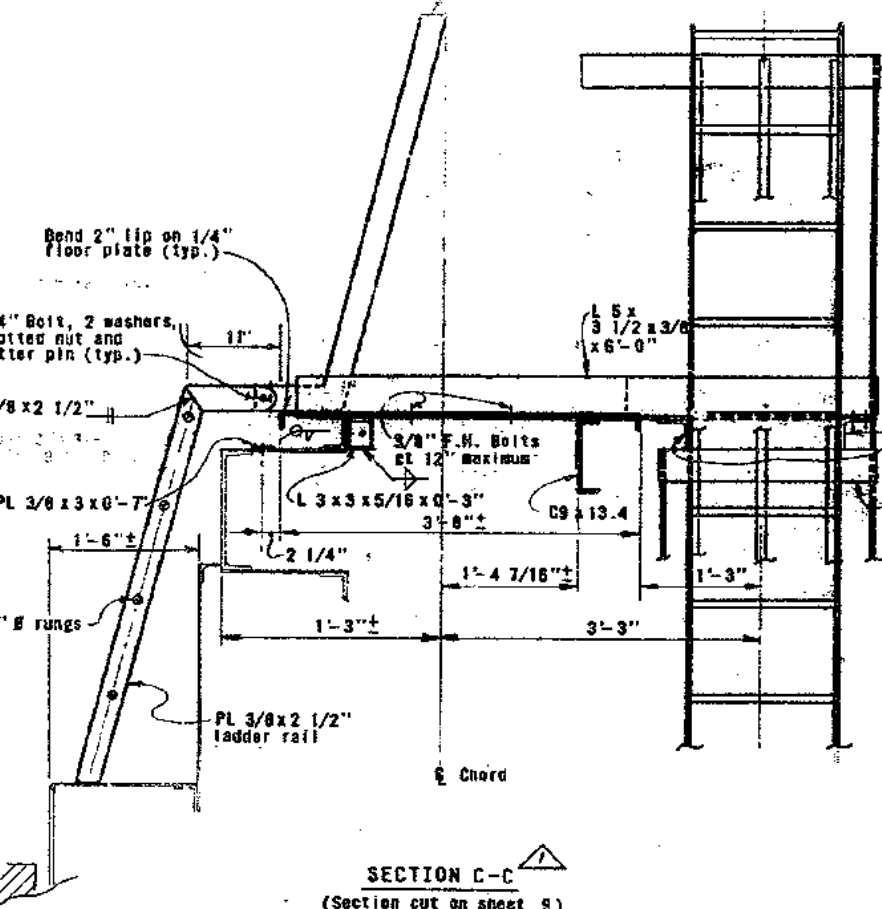


**DETAIL 2**  
(Typical rung to rail connection detail)  
Half Size

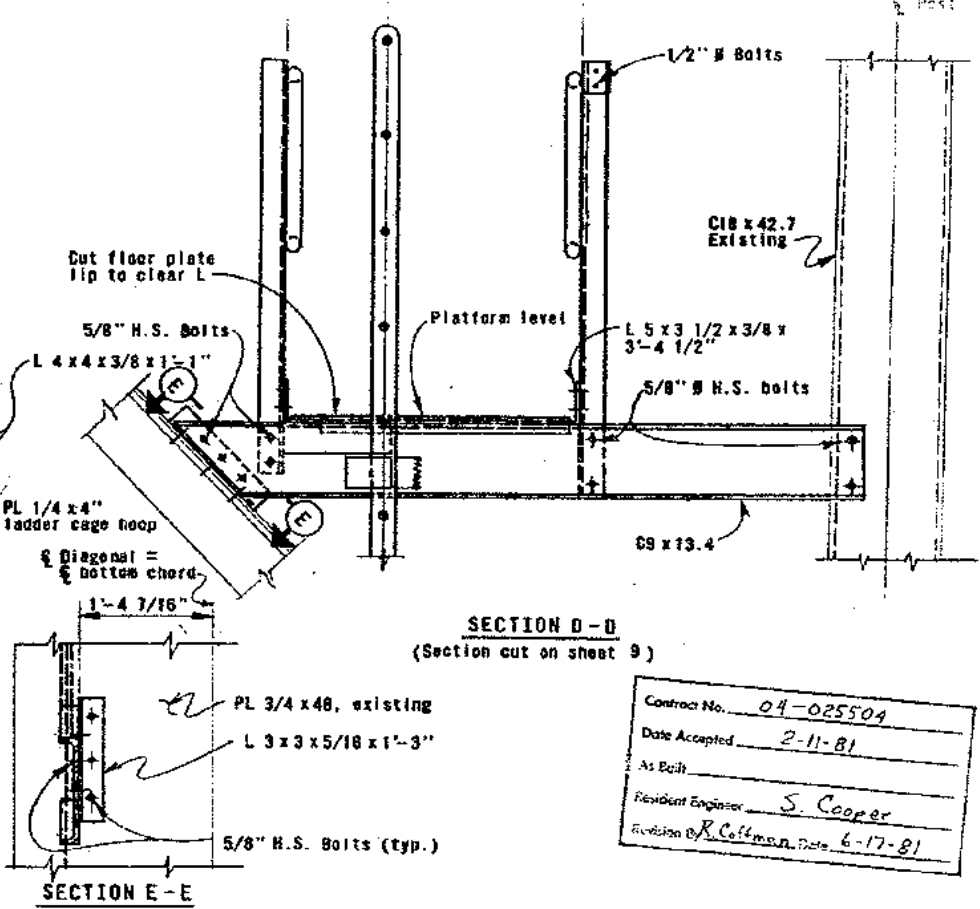
**LADDER DETAILS**



**UPPER LADDER DETAIL**  
(North Side)



**SECTION C-C**  
(Section cut on sheet 9)



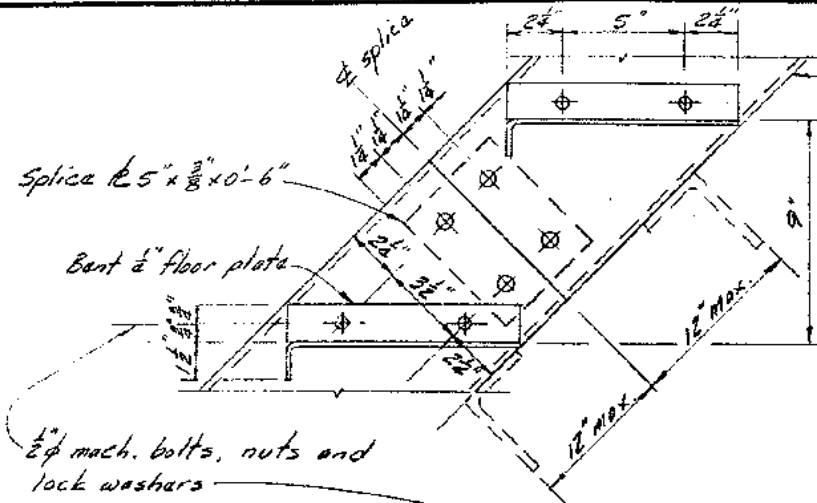
**SECTION D-D**  
(Section cut on sheet 9)

**SECTION E-E**

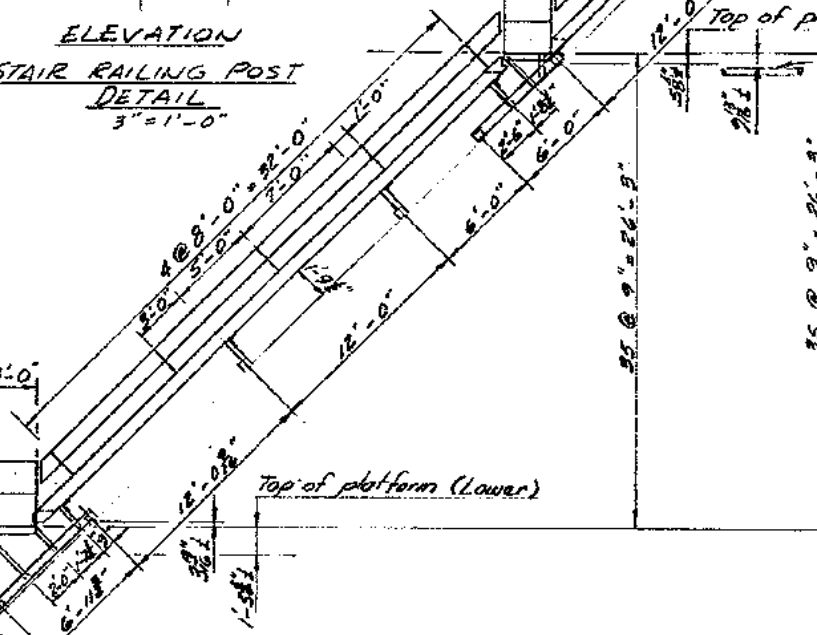
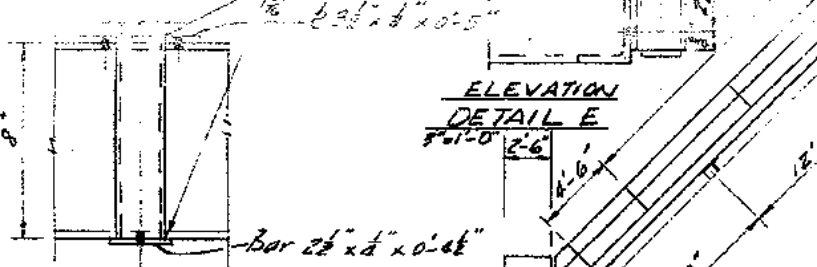
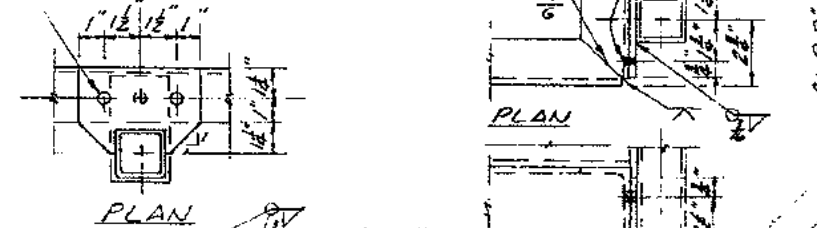
Contract No. 04-025504  
Date Accepted 2-11-81  
As Built  
Resident Engineer S. Cooper  
Revision R. Coleman Date 6-17-81

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN BY <u>P.E. Kojan</u>	CHECKED BY <u>T. J. Kojan</u>	APPROVED <u>January 29, 1979</u>	
DESIGN <u>W. J. Kojan</u>	CHECKED <u>P.E. Kojan</u>	DESIGNED BY <u>S. Cooper</u>	
BY CHARGE OF DESIGN <u>P.E. Kojan</u>	BY <u>RC</u>	REGISTERED ENGINEER C12732	
MARK <u>3-03</u>	DATE <u>As built with revisions</u>	DESIGN ENGINEER — REG. ENG. C12732	
SAN FRANCISCO - OAKLAND BAY BRIDGE		WALKWAY AT PIER E4-S	
EAST BAY LADDERS AND WALKWAYS		SCALE Unless Noted 1" = 1'-0"	
SHEET NO. 13		DRAWING NO. 04-025504-13R	



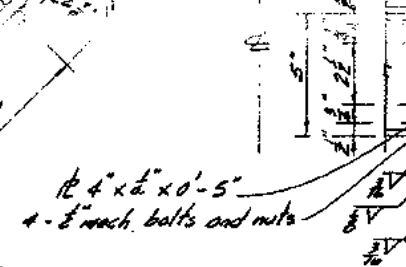
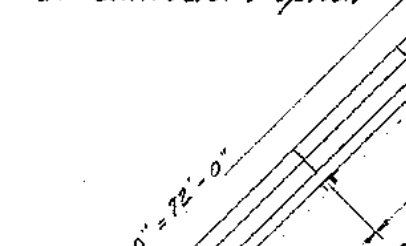


STAIR TREAD AND CHANNEL SPLICE  
DETAIL  
3" = 1'-0"



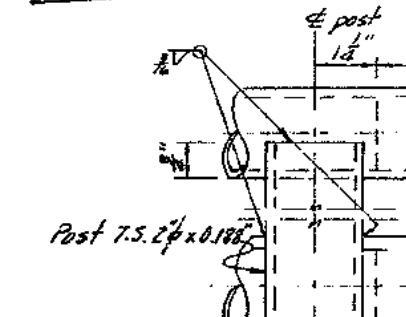
POSTS LA10-UB @ Pier E1 and Pier E4 - South Truss  
(West end as shown, East end similar in opposite hand)  
 $\frac{3}{16}$ " = 1'-0"

NOTE  
Alternate welded connection  
in lieu of bolted connection  
at contractor's option

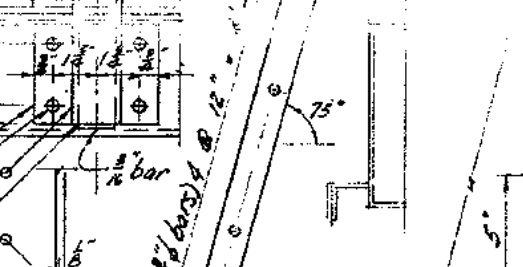
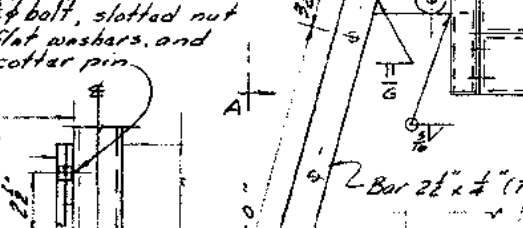
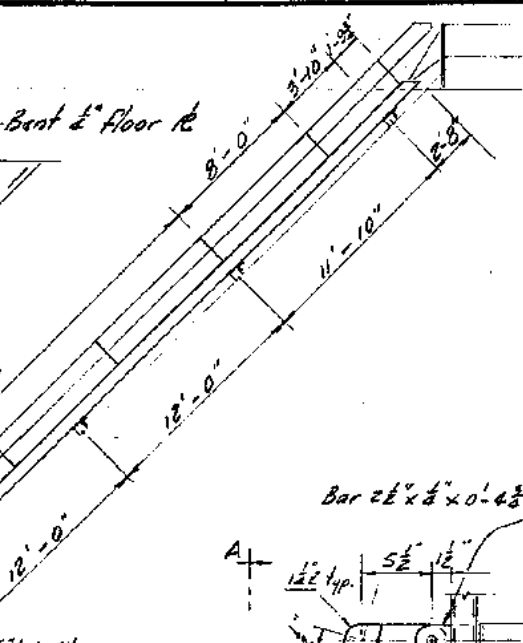


VIEW A-A  
3" = 1'-0"

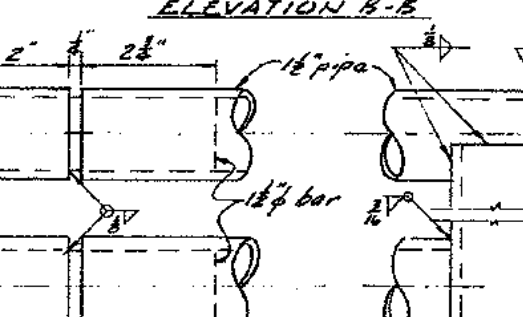
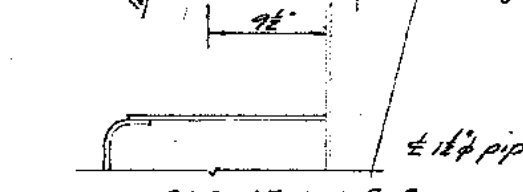
Contract No.	0A-025504
Date Accepted	2-11-81
As Built	
Resident Engineer	S. Cooper
Revision By	R. Coffman Date 6-17-81



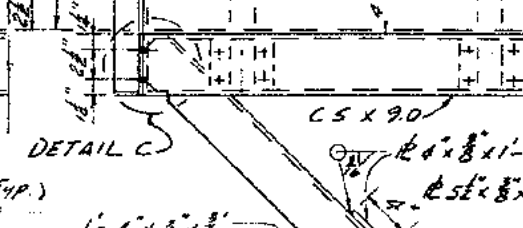
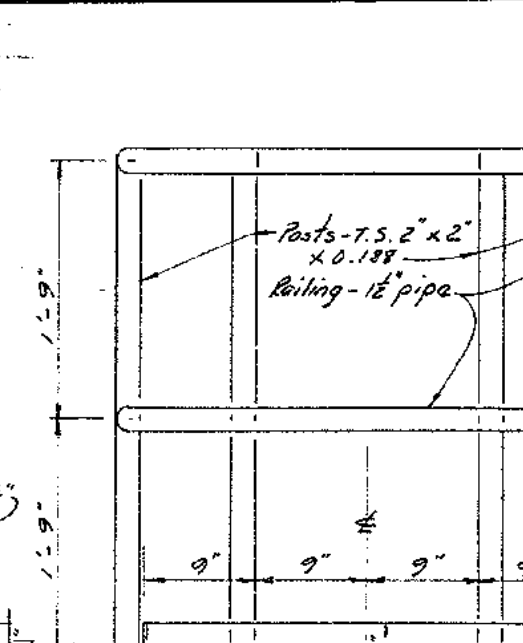
RAILING SPLICE & END DETAIL  
3" = 1'-0"



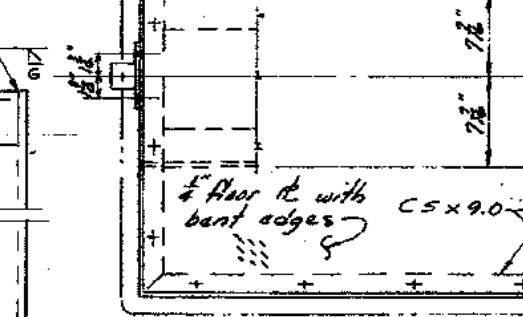
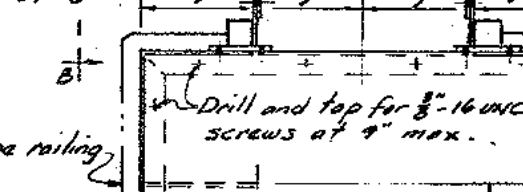
ELEVATION B-B  
3" = 1'-0"



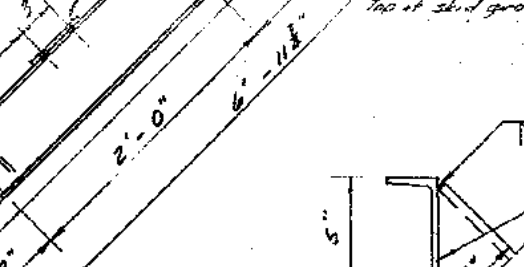
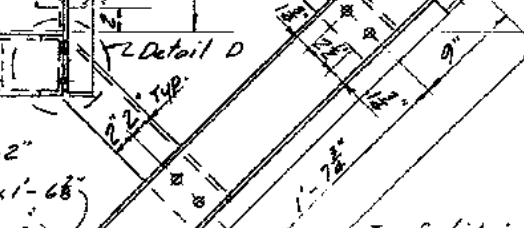
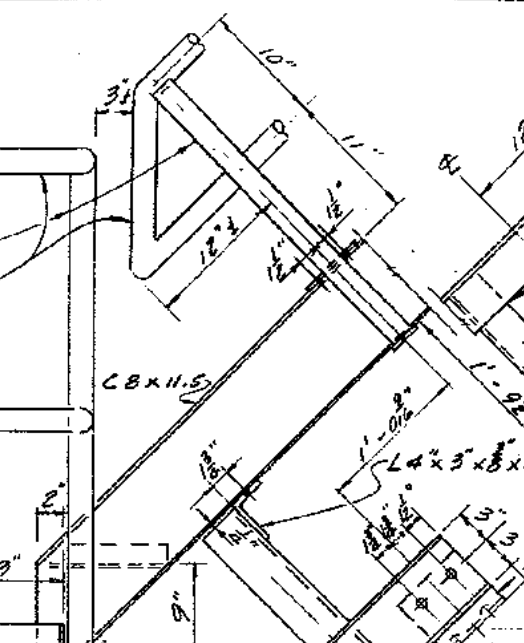
RAILING SPLICE & END DETAIL  
3" = 1'-0"



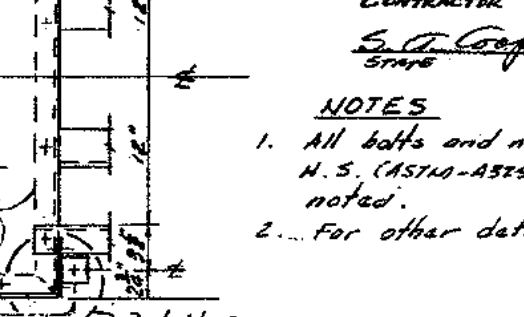
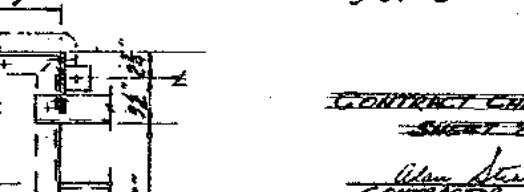
ELEVATION  
3" = 1'-0"



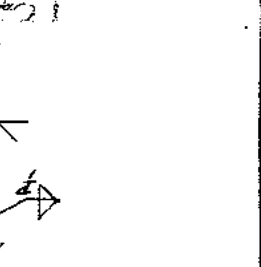
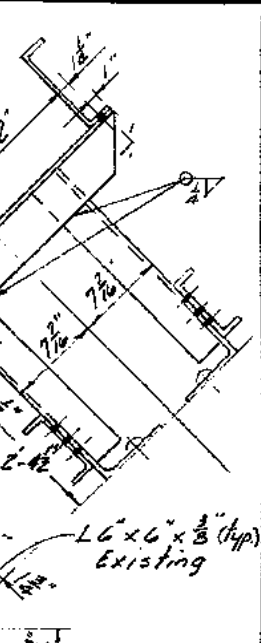
LOWER PLATFORM DETAIL  
3" = 1'-0"



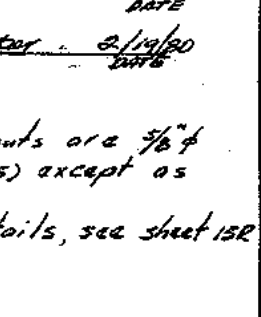
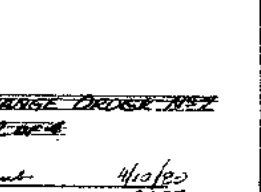
ELEVATION  
3" = 1'-0"



LOWER PLATFORM DETAIL  
3" = 1'-0"



ELEVATION  
3" = 1'-0"



LOWER PLATFORM DETAIL  
3" = 1'-0"

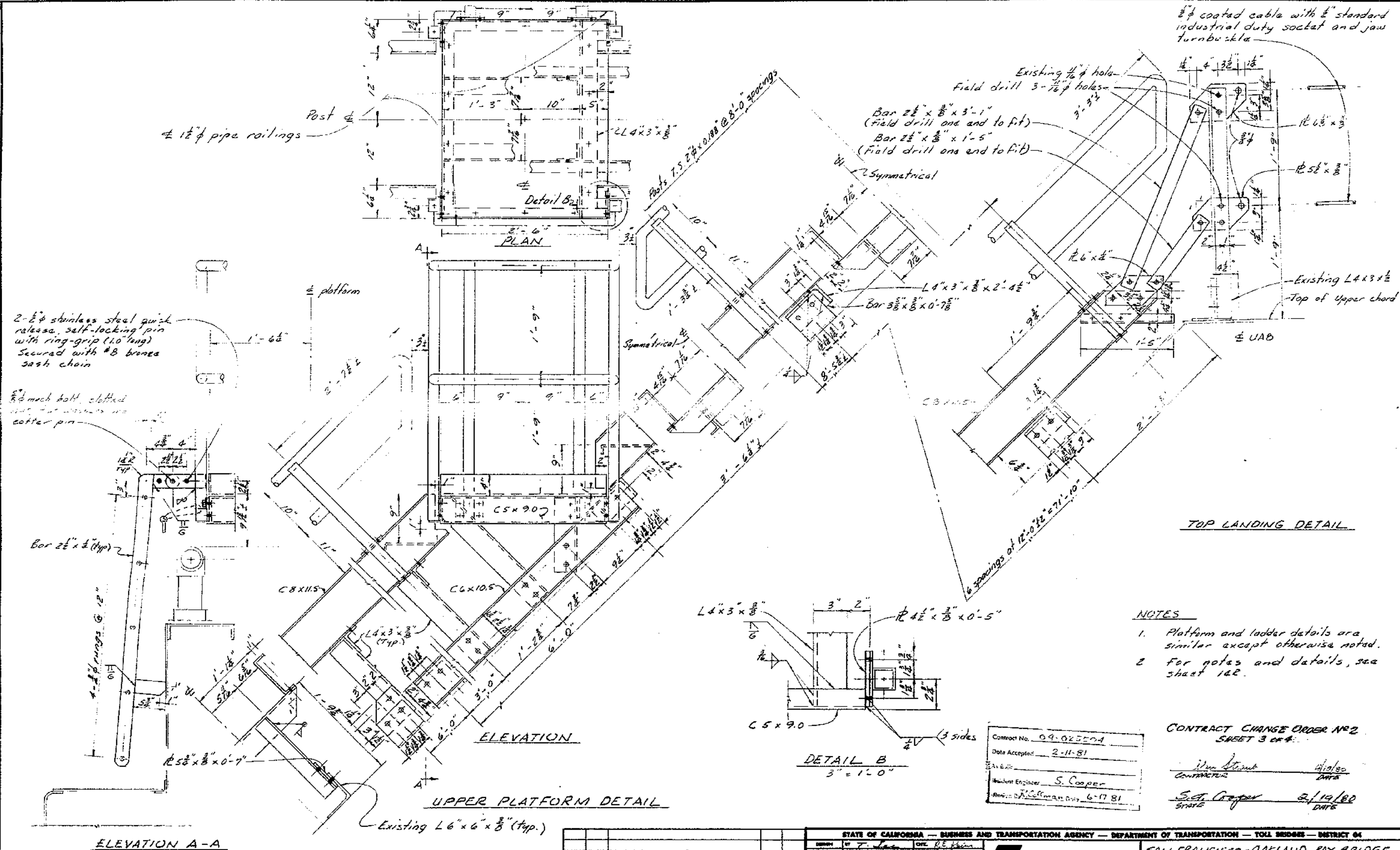
CONTRACT CHANGE ORDER NO. 152  
SHEET 2 OF 2

Alvin Stearns  
CONTRACTOR  
4/10/80  
DATE

S. A. Cooper  
SUPERVISOR  
2/19/80  
DATE

NOTES  
1. All bolts and nuts are  $\frac{3}{8}$ "  
A.S. (ASTM-A325) except as  
noted.  
2. For other details, see sheet 152

STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION - TOLL BRIDGES - DISTRICT 04	
DESIGN BY T. Lee	CHECKED BY R. E. Kinn
DESIGN BY T. Lee	CHECKED BY R. E. Kinn
IN CHARGE OF DESIGN Thomas Lee	
APPROVAL BY Slarsen	
1-3-83 As built without revision	RC ART
DATE	BY
SAN FRANCISCO-OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS LADDER DETAILS - CANTILEVER SPANS Scale 1/8" = 1'-0" Unless noted	
DATE 1/8/81	REVISION 0A-025504-142



# NOTES

- Platform and ladder details are similar except otherwise noted.
- For notes and details, see sheet 142.

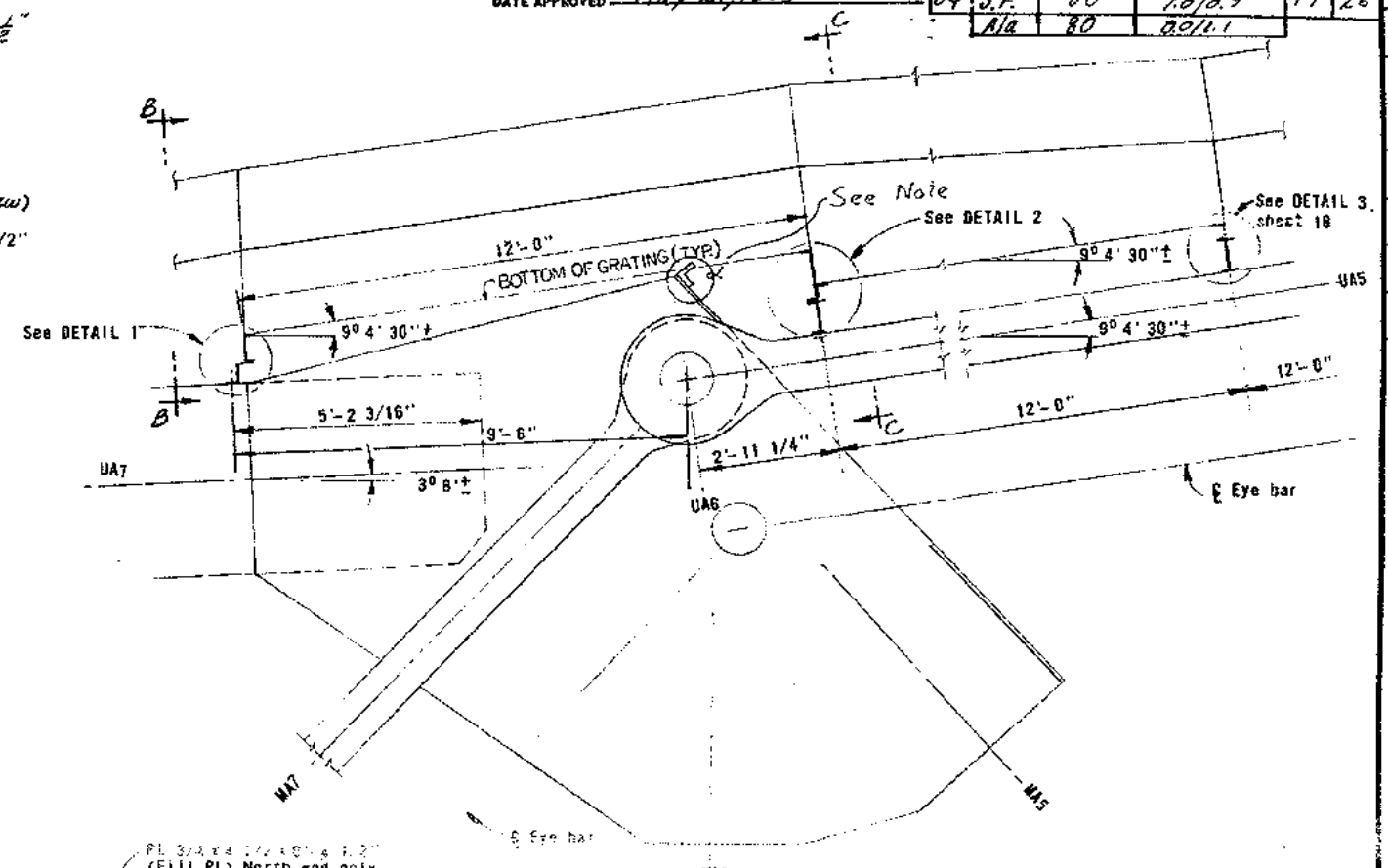
## CONTRACT CHANGE ORDER NO. 2 SHEET 3 OF 4

Contract No.	04-025504
Date Accepted	2-11-81
As Built	
Student Engineer	S. Cooper
Revision	6-17-81

Contractor	4/10/80
DATE	
State	2/14/80
DATE	

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION — TOLL BRIDGES — DISTRICT 04			
DESIGN BY	DATE	CHECKED BY	DATE
REVISION	DATE	CHECKED BY	DATE
IN CHARGE OF DESIGN		APPROVAL	
7.2		APPROVED	
APPROVAL RECOMMENDATION		DATE	
3.1.83		15R	
MARK	DATE	REVISION	BY
1	3-83	A= built without revision	RC ART
SAN FRANCISCO-OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS PLATFORM AND LADDER DETAILS-CANTILEVER SPANS SCALE 1/8"=1'-0" SHEET NO. 15R DRAWING NO. 04-025504-15R			

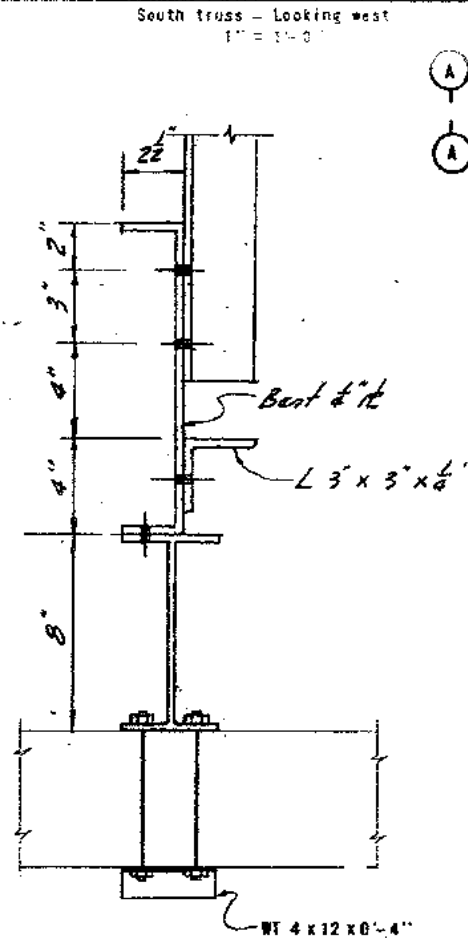




SECTION VIEW OF UA8 - UA7 - UA6 (with scaffold support)

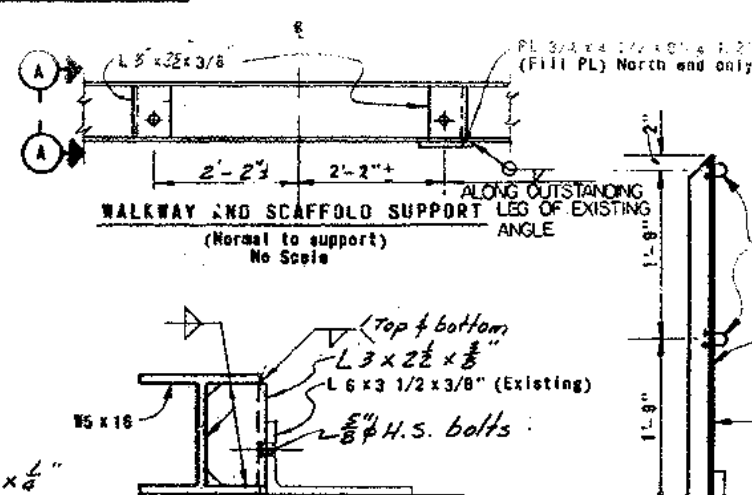
South truss - Looking west

South truss - Looking west

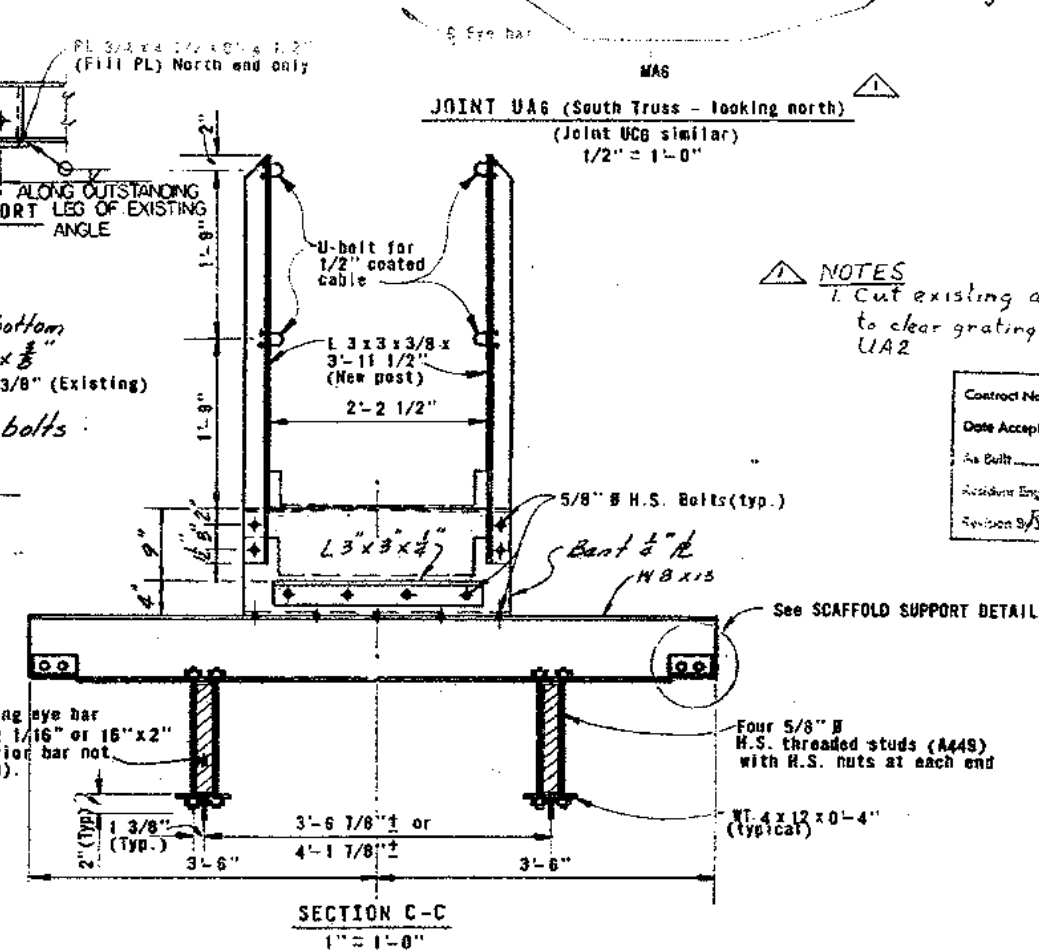


DETAIL 2  
South truss - looking north  
No Scale

DETAIL 1  
South truss - looking north  
3" = 1'-0"



**SECTION A-A**  
**Looking Northeast**



SECTION C-C  
1" = 1'-0"

NOTES  
1. Cut existing angles as necessary to clear gratings at all joints except UA2

Contract No. 04-025504  
Date Accepted 2-11-81  
As Built \_\_\_\_\_  
Assistant Engineer S. Cooper  
Reviewed By R. Soffman Date 6-17-81

DESIGN	BY <u>J. Smith</u>	CHECKED <u>R.E. Kaim</u>
DRAWN	BY <u>J. Smith</u>	CHECKED <u>R.E. Kaim</u>
SPECIFICATION	<u>Revised</u>	APPROVED <u>R. Kaim</u>
IN CHARGE OF DESIGN <u>1</u>		

**DATE** January 29, 1979

SAN FRANCISCO - OAKLAND BAY BRIDGE  
EAST BAY LADDERS AND WALKWAYS

WALKWAY DETAILS - CANTILEVER SPANS - 2

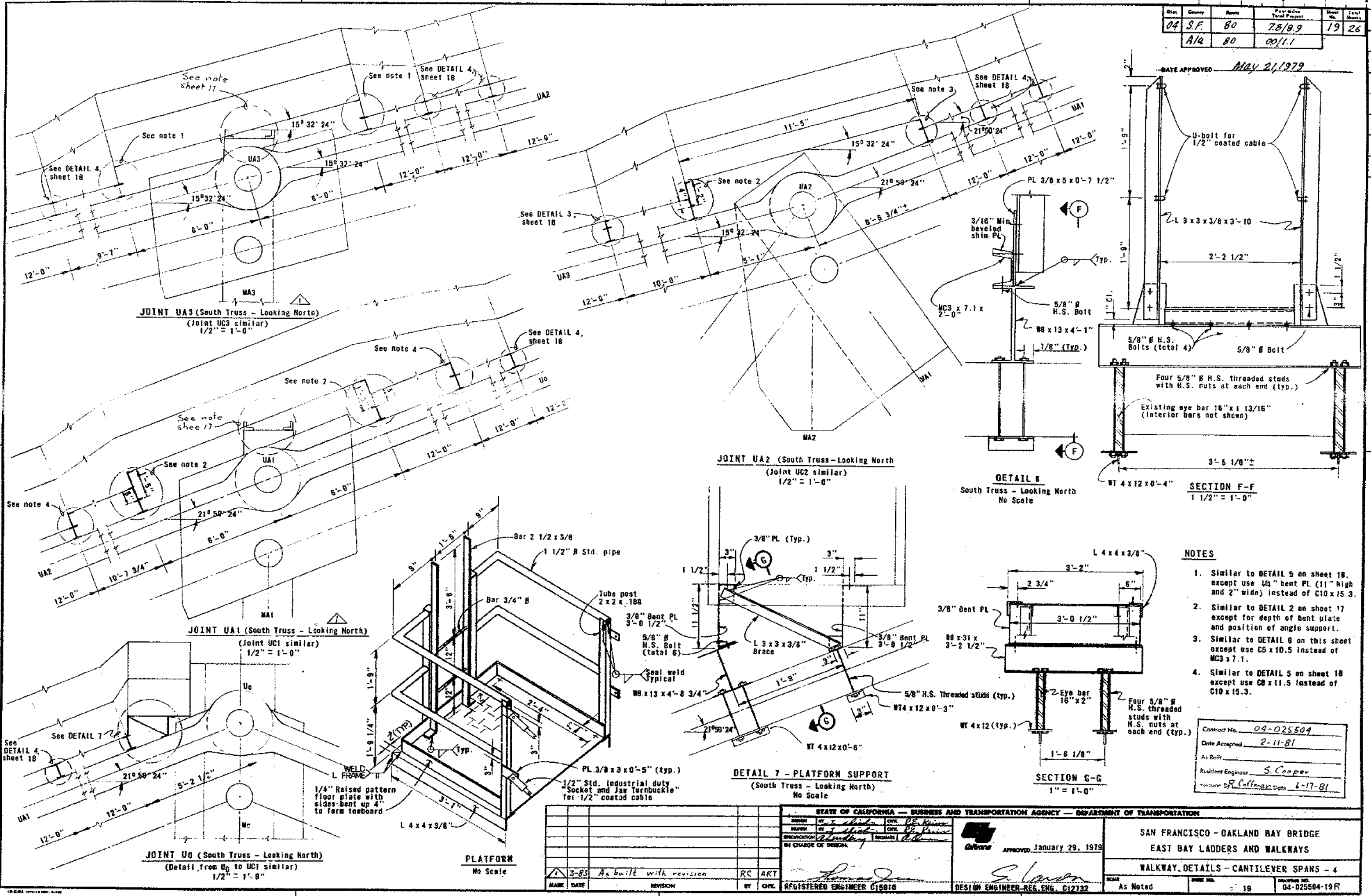
SCALE	SHEET NO.	DRAWING NO.
As Noted	17	04-025504-17R



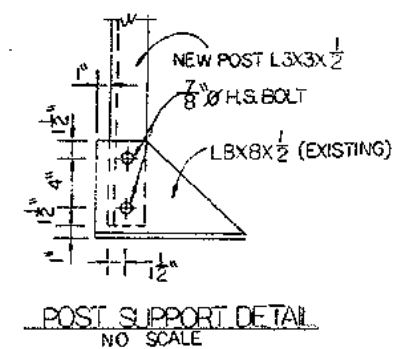
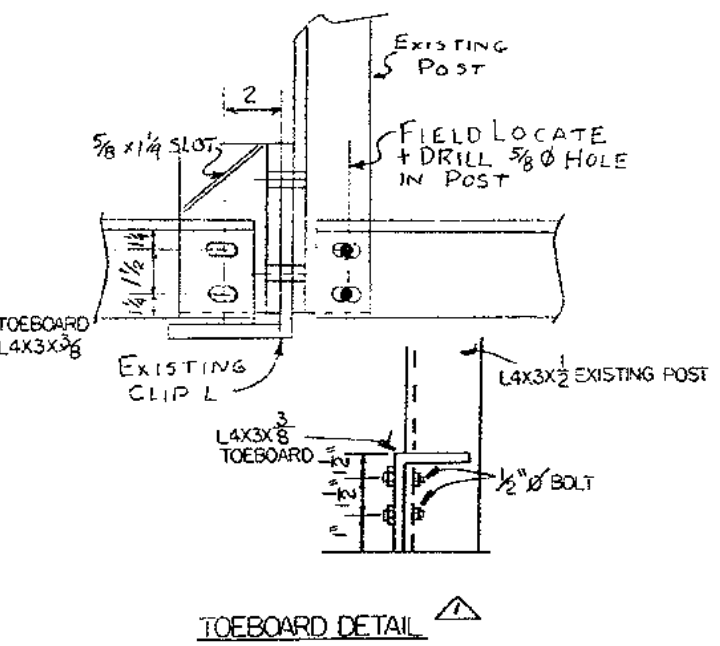
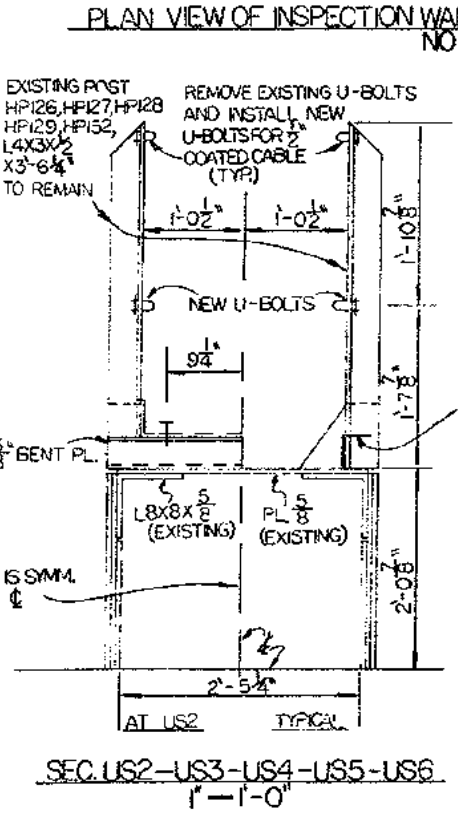
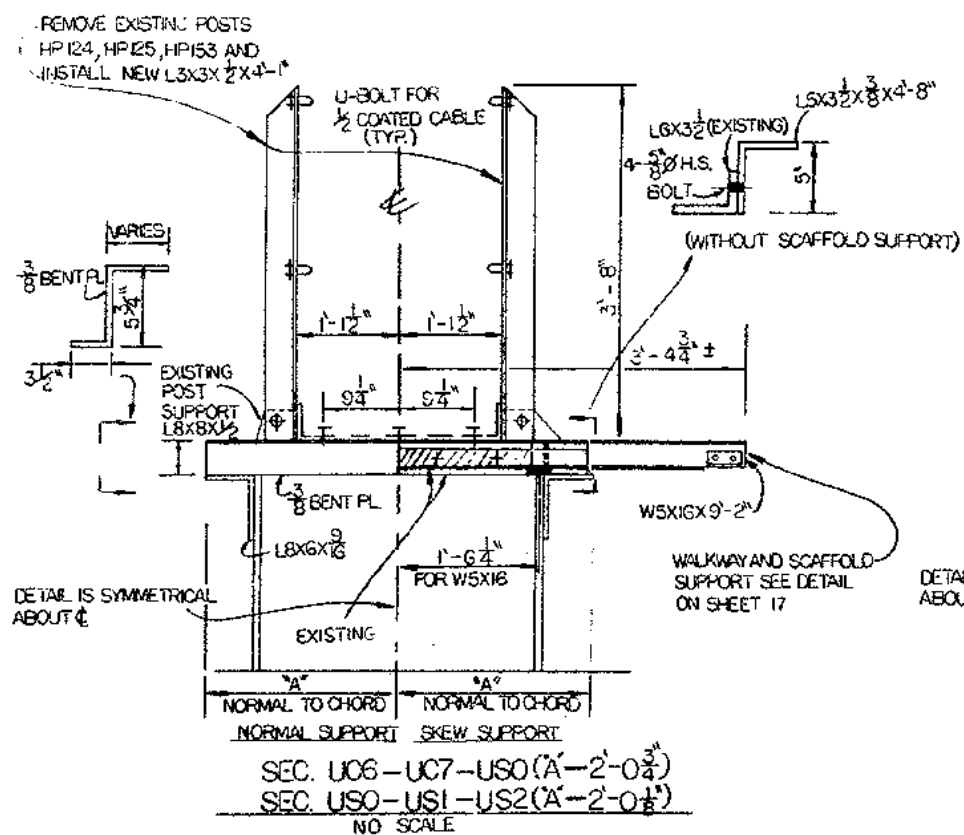
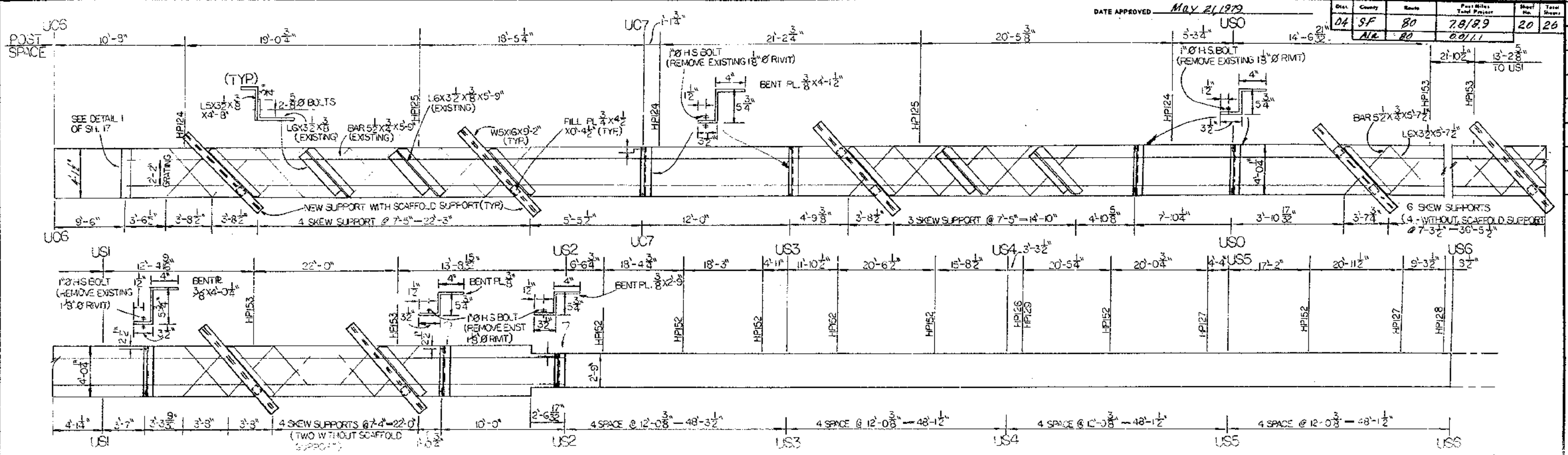


Dist.	County	Revs.	Per Mile Total Project	Sheet No.	Total Sheets
04	S.F.	80	7.8/8.9	19	26
A/a		80	00/1.1		

DATE APPROVED May 21, 1979





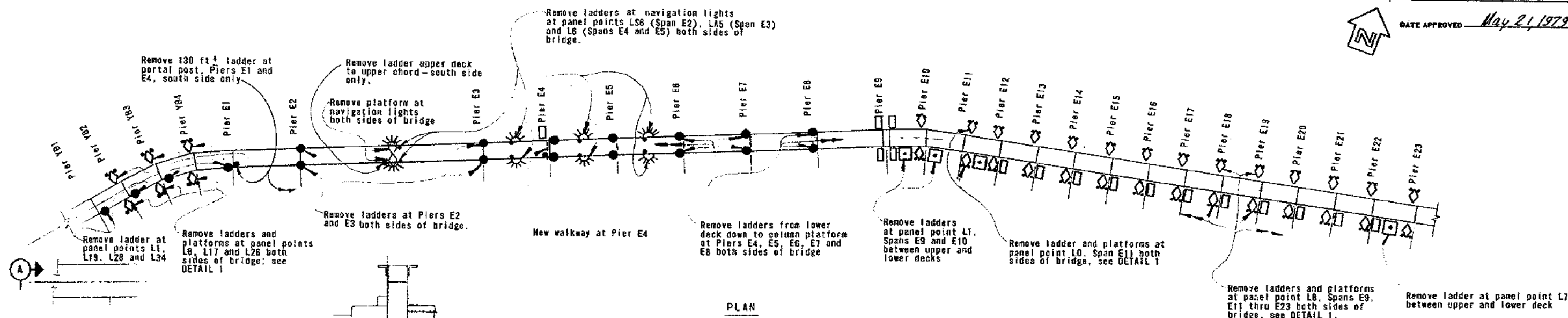


Contract No. 04-025504  
 Date Accepted 2-11-81  
 As Built  
 Resident Engineer S. Cooper  
 Inspection R. C. Hoffman, Date 6-17-81

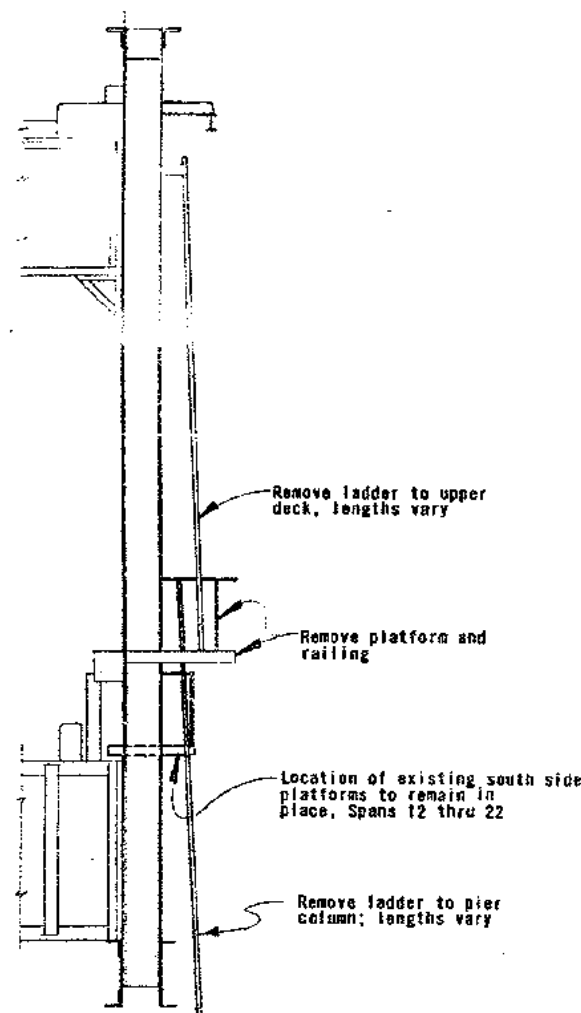
STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION			
DESIGNER R. C. Hoffman	CHECKED R. C. Hoffman	APPROVED January 29, 1978	SAN FRANCISCO - OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS WALKWAY DETAILS - CANTILEVER SPANS - 5 SCALE As Noted SHEET NO. 20 DRAWING NO. 04-025504-20
BY CHARGE OF DESIGN R. C. Hoffman	DESIGNED R. C. Hoffman	REGISTERED ENGINEER C15818	
3-83 As built with revision	RE ART	DESIGN ENGINEER - REG. ENG. C12732	

Dist.	County	Route	Post Miles Total Project	Sheet No.	Total Sheets
04	SF	80	7.8/8.9	21	26
	A/R	80	0.0/1.1		

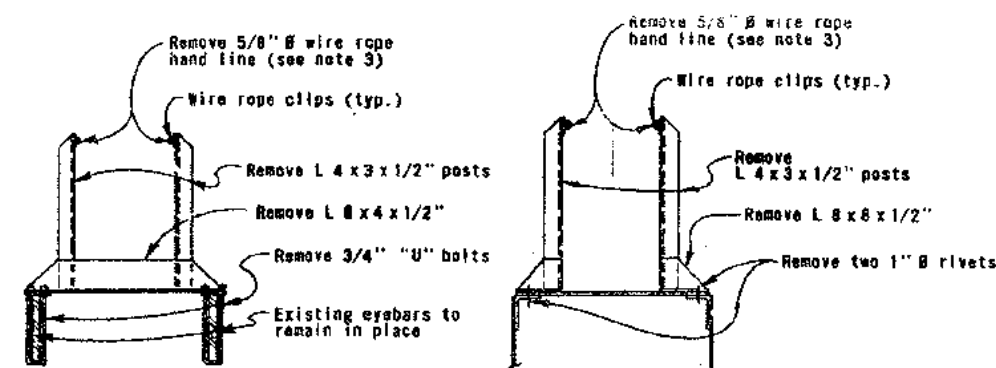
DATE APPROVED May 21, 1979



### PLAN



## SECTION A-A









TOP CHORD SECTION - EYEBARS  
Remove post assemblies from UA6 to UC6,  
total 72 assemblies - south truss only.

**TOP CHORD SECTION - SOLID MEMBERS**  
(Remove post assemblies from UC6 to US2,  
total 18 assemblies - south truss only)

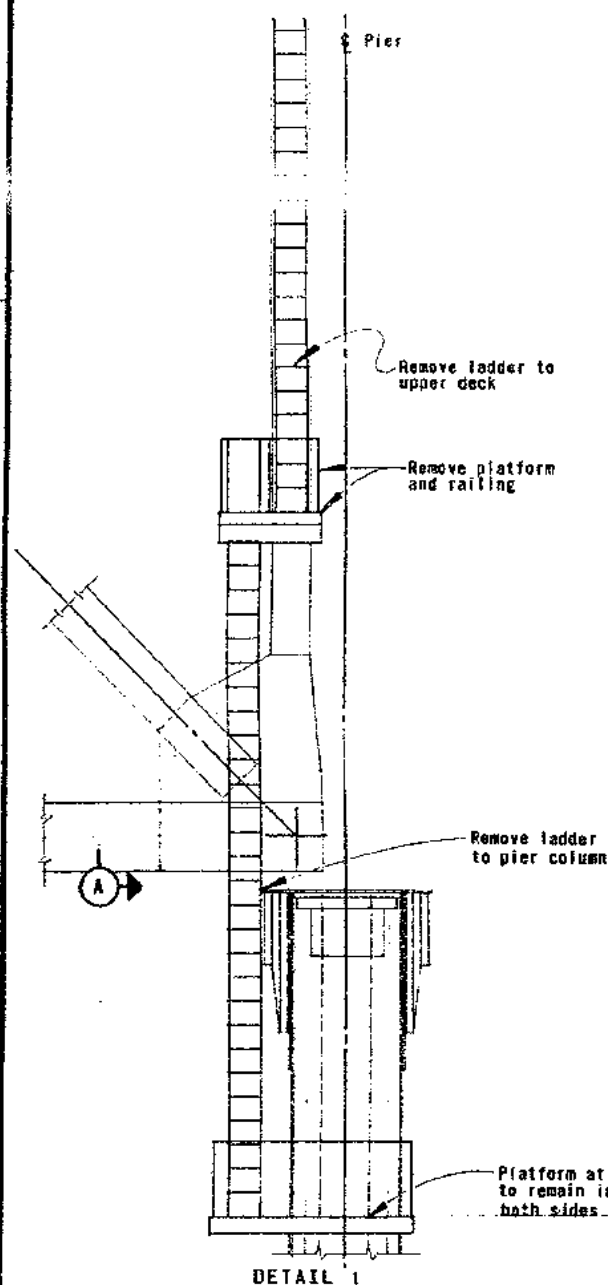
EXISTING WALKWAY - CANTILEVER SPANS

- ### LEGEND

-  Remove platform and two ladders. See DETAIL f.
-  Remove ladder only
-  Remove ladder
-  Existing platform to remain in place
-  Location of navigation light
-  Remove platform at navigation lights

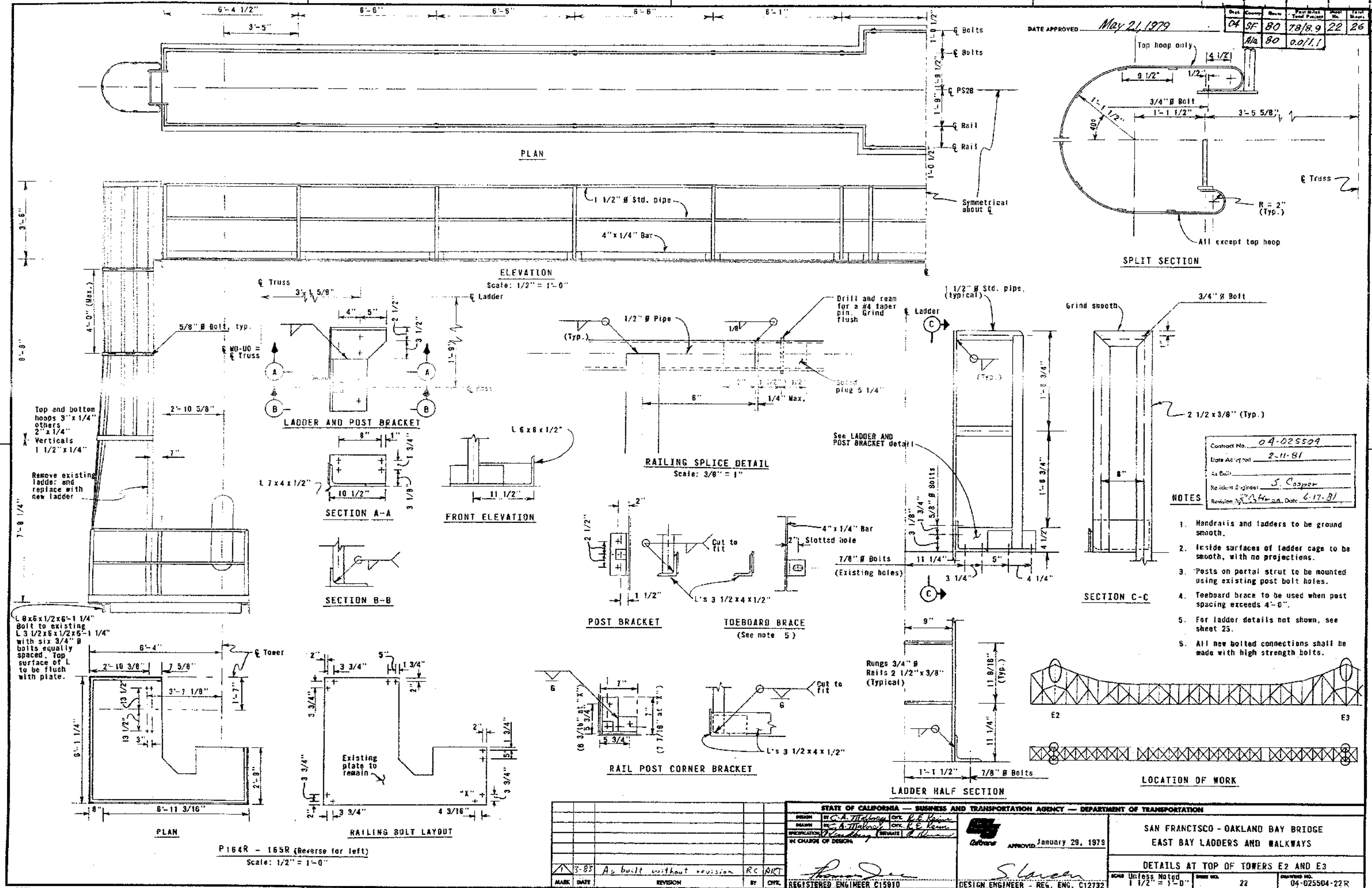
## NOTES

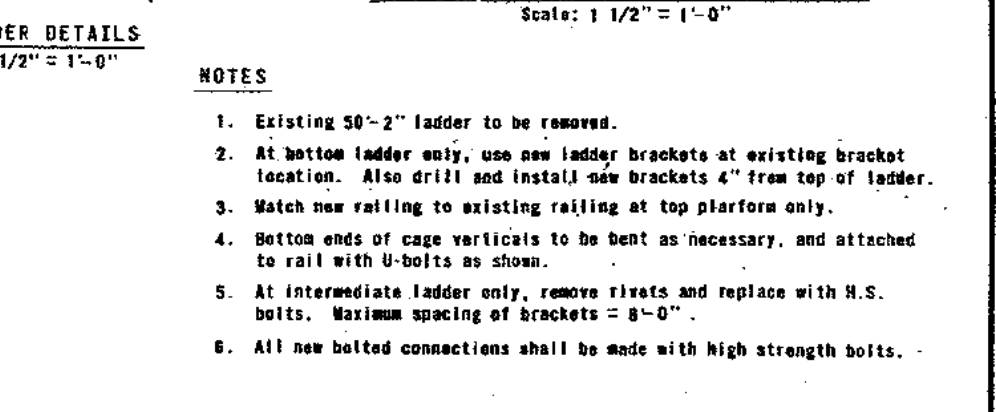
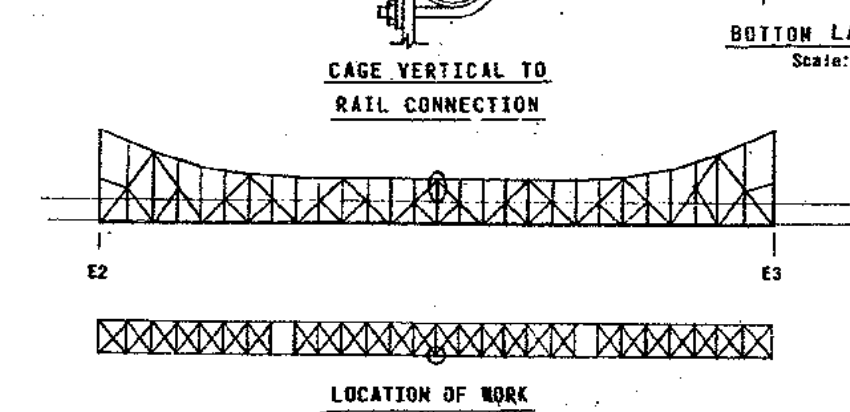
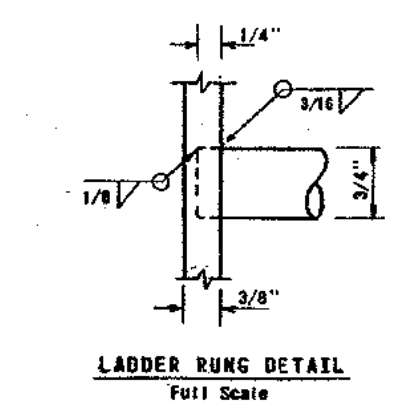
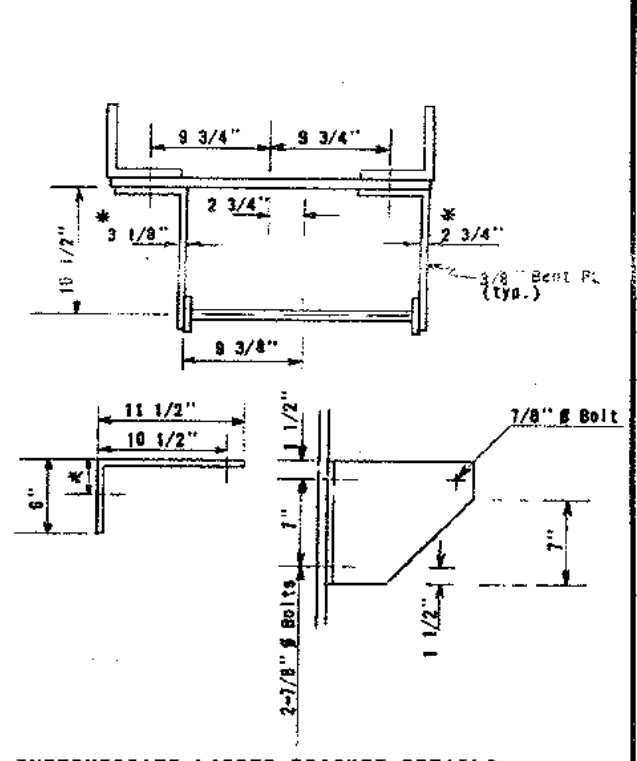
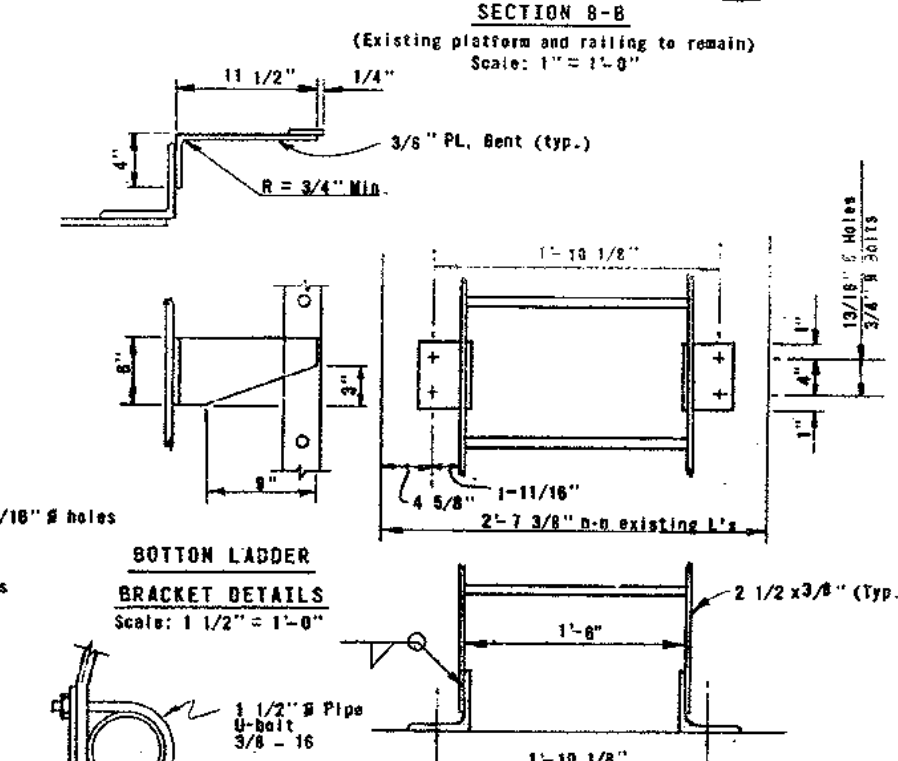
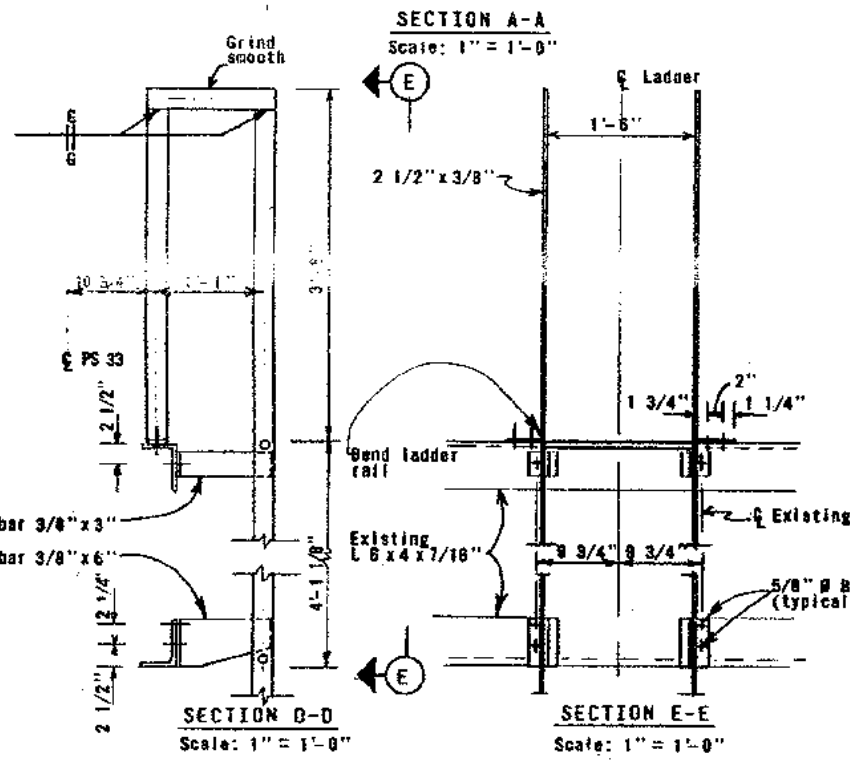
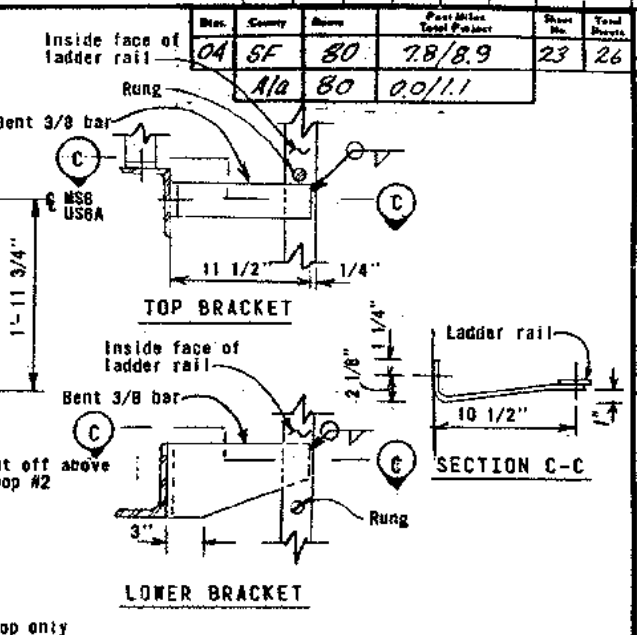
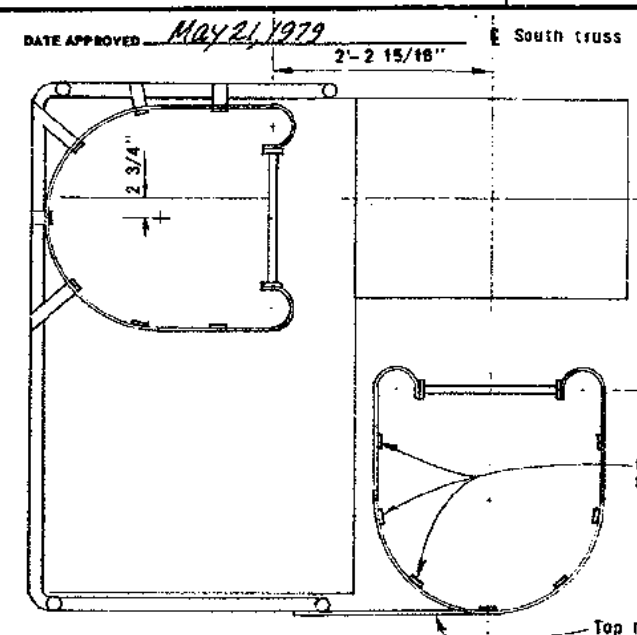
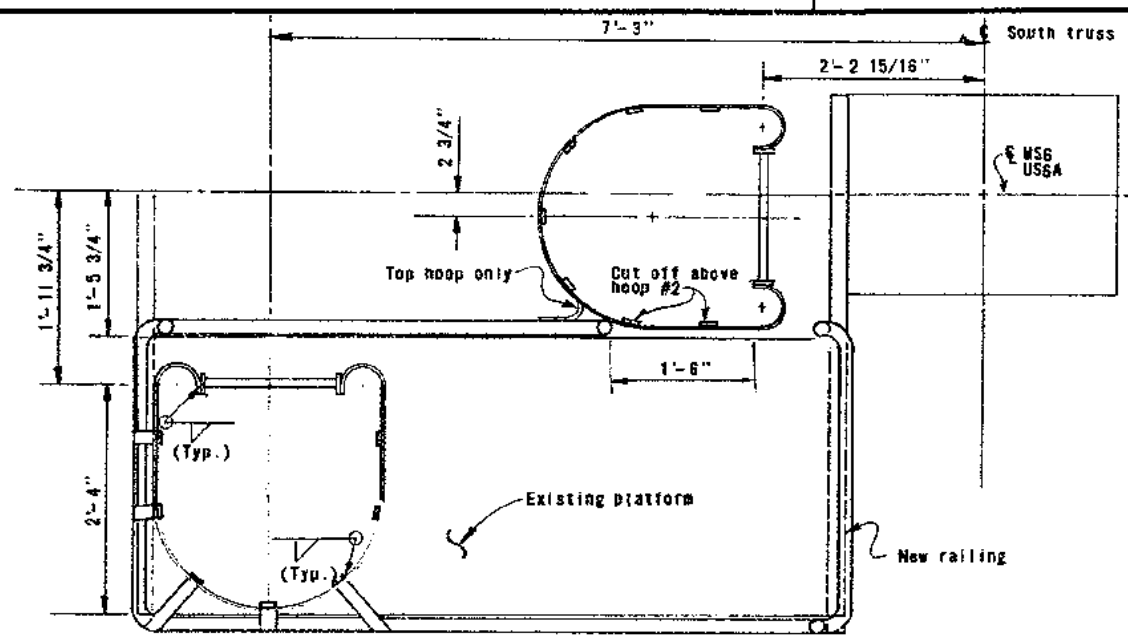
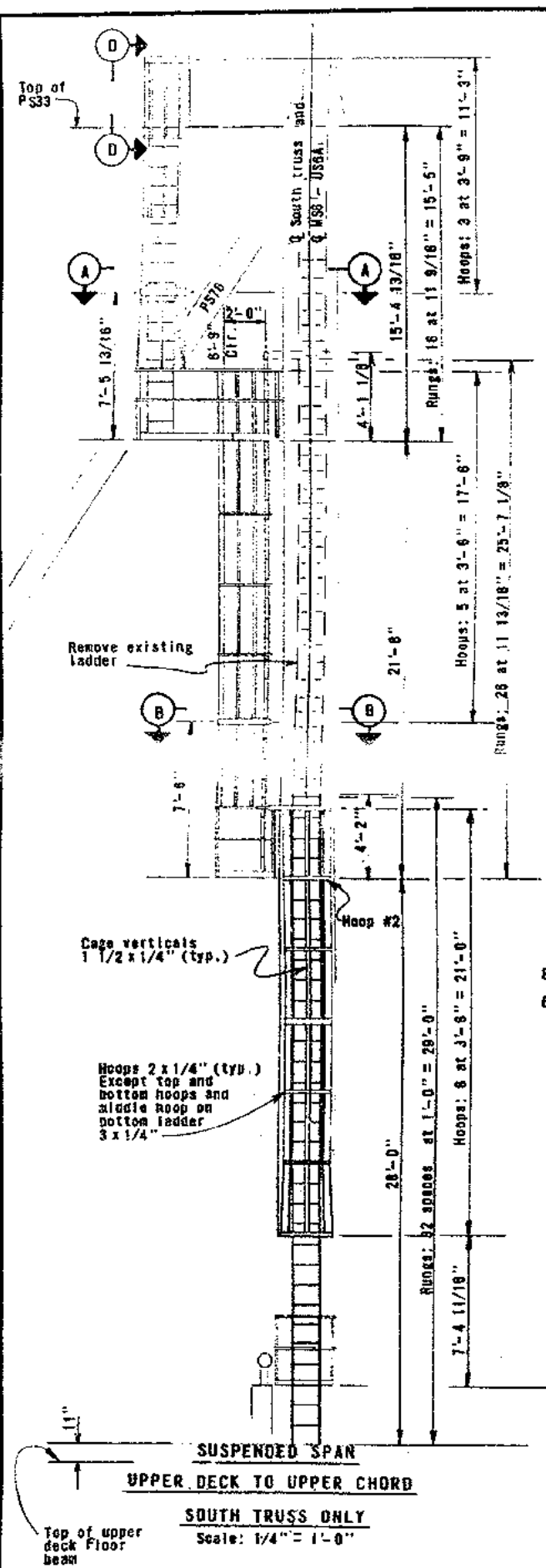
1. Removal of platforms includes platform railings and support brackets.
2. Original construction drawings are available for most removal details. Site inspection may be arranged to obtain details not covered by these drawings.
3. Remove existing 5/8" # wire rope headline along the top chord of the south truss from Pier E1 to E4. (Approximate length - 2270<sup>±</sup> feet per side).



DETAIL 1

						STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION	
		DESIGN BY	<i>R.E. Kiser</i>	CITY	<i>T. J.</i>	SAN FRANCISCO - OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS PLATFORM, LADDER AND RAILING RENOVAL	
		DRAWN	<i>W.C. CLEGG</i>	CITY	<i>R.E. Kiser</i>		
		INSPECTION	<i>W.C. CLEGG</i>	ESTIMATE	<i>W.C. CLEGG</i>		
		IN CHARGE OF DESIGN					
		APPROVED <i>W.C. CLEGG</i> January 29, 1979 <i>S. Larson</i>				SCALE No Scale SHEET NO. 21 DRAWING NO. 04-025504-21R	
1	3-83	As built without revision				K.C.	ART
MARK	DATE	REVISION				BY	CITY
		REGISTERED ENGINEER C15910				DESIGN ENGINEER - REG. ENG. C12732	





- NOTES**
- Existing 50'-2" ladder to be removed.
  - At bottom ladder only, use new ladder brackets at existing bracket location. Also drill and install new brackets 4" from top of ladder.
  - Match new railing to existing railing at top platform only.
  - Bottom ends of cage verticals to be bent as necessary, and attached to rail with U-bolts as shown.
  - At intermediate ladder only, remove rivets and replace with H.S. bolts. Maximum spacing of brackets = 8'-0".
  - All new bolted connections shall be made with high strength bolts.

Contract No. **04-D25504**  
 Date Accepted **2-11-81**  
 As Built  
 Resident Engineer **S. Cooper**  
 Revision by **R. C. H. M. A.** Date **6-17-81**

MARK	DATE	REVISION	BY	CHK.
1	3-83	As built without revision	RC	ART

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION

DESIGN **W. C. A. Wilson** CHK. **P. L. Klein**  
 DRAWN **W. C. A. Wilson** CHK. **P. L. Klein**  
 SPECIFICATION **W. C. A. Wilson** ESTIMATE **P. L. Klein**  
 IN CHARGE OF DESIGN

APPROVED January 29, 1979  
**G. Hansen**  
 DESIGN ENGINEER — REG. ENG. C12732

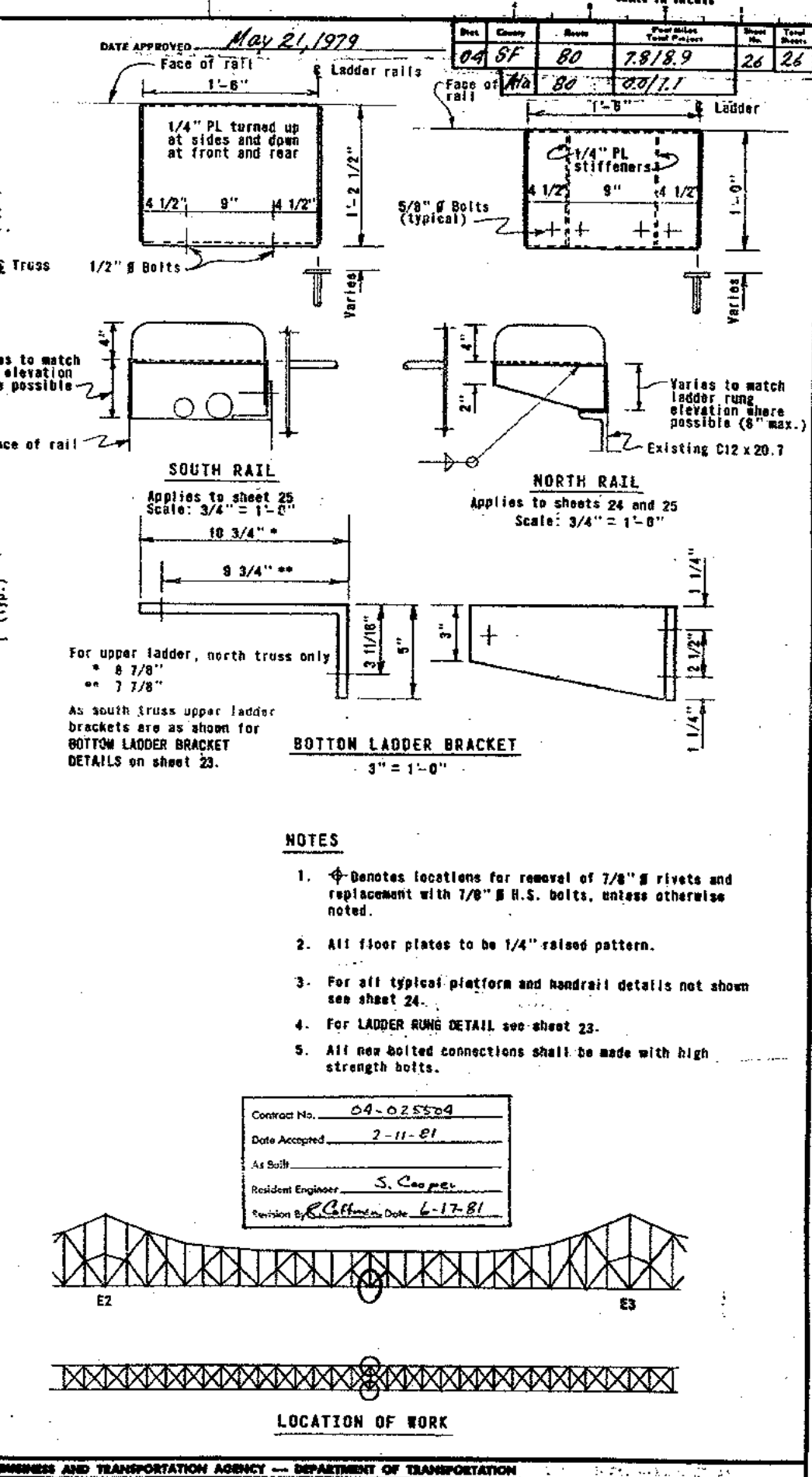
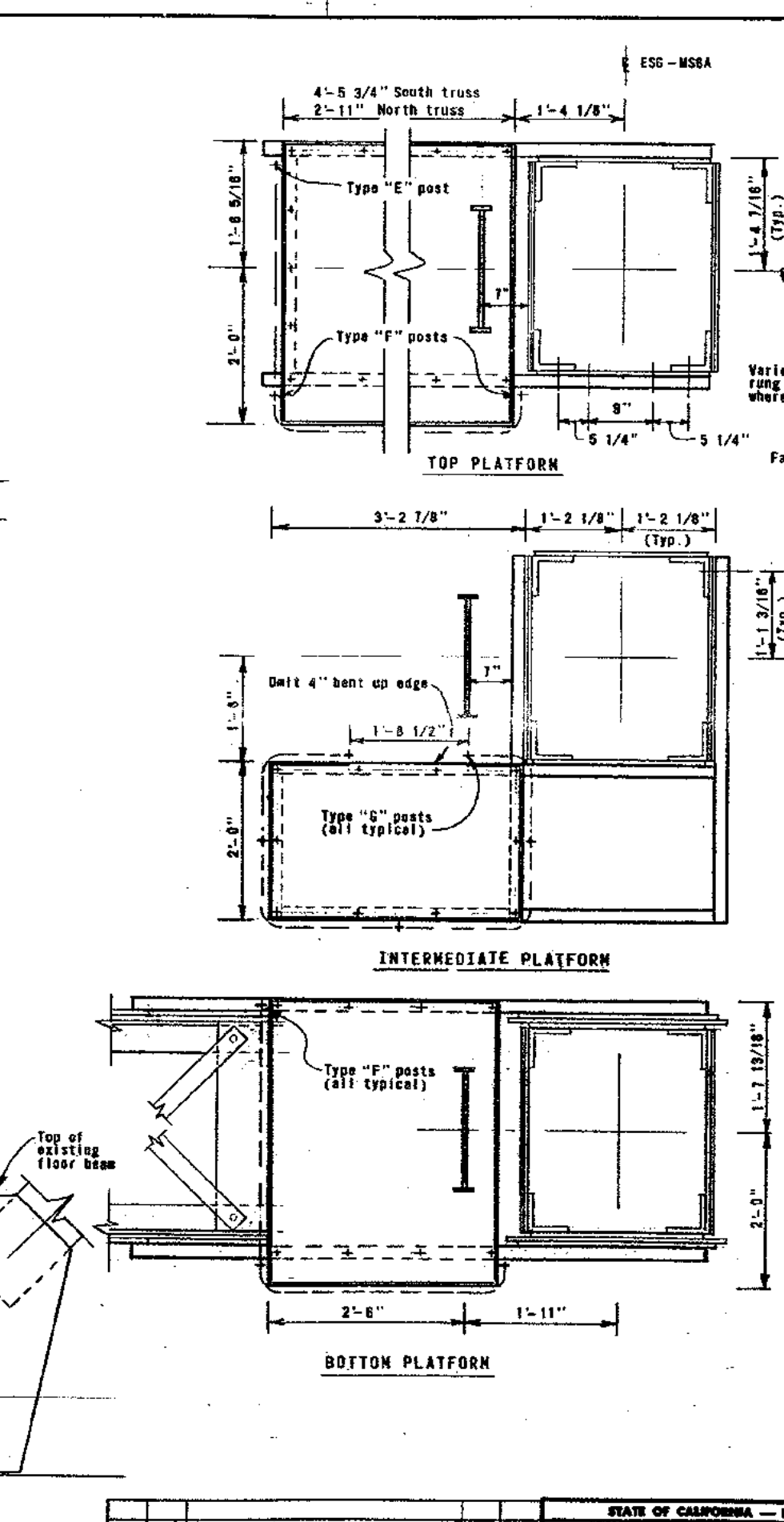
**SAN FRANCISCO - OAKLAND BAY BRIDGE**  
**EAST BAY LADDERS AND WALKWAYS**  
**DETAILS IN SUSPENDED SPAN AT MS6-US8A**

As Noted  
 DRAWING NO. **23**  
 PROJECT NO. **04-D25504-23B**

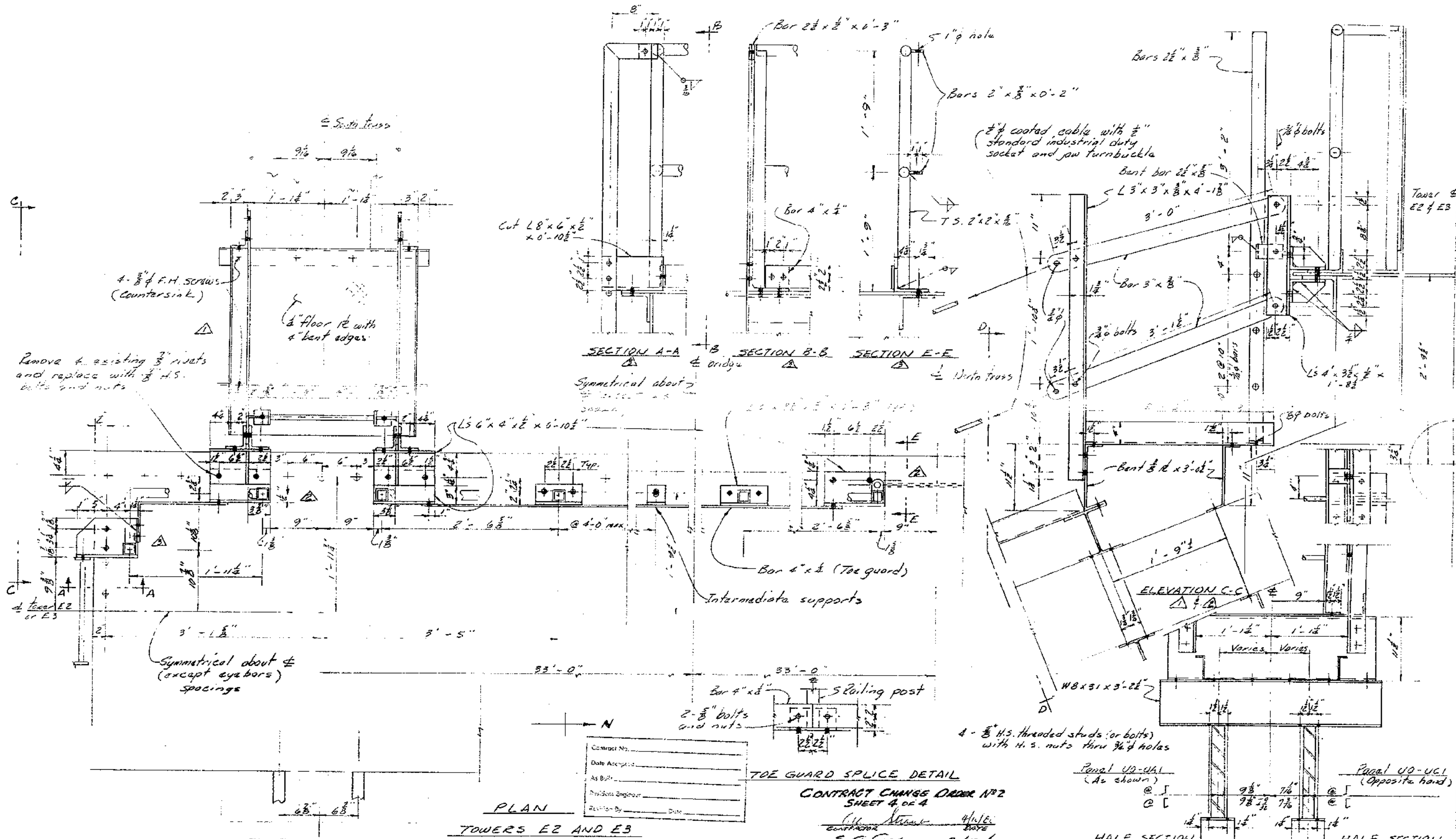








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MARK	DATE	REVISION	BY	CHECK
A		Platform and cable railing anchorage details		
B		Railing openings thru towers E2 & E3 @ north & south trusses		
C		Side vertical ladder connector		

DESIGNED BY	DATE	CHECKED BY	DATE
DRAWN BY	DATE	CHECKED BY	DATE
IN CHARGE OF DESIGN	DATE	REMARKS	
APPROVAL RECOMMENDED	DATE		

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION — TOLL BRIDGES — DISTRICT 04	
APPROVED	APPROVED
S. G. Cooper	S. Larson
2/19/60	2/19/60

SAN FRANCISCO-OAKLAND BAY BRIDGE EAST BAY LADDERS AND WALKWAYS SUPPLEMENTARY DESIGN DRAWING	
REVISION DETAILS	
REVISION NO. 1	1-0"
DATE	27
DRAWING NO.	04-025504-21R